

19980313.qrp v01\_n028.qrs.980313

Date: Fri, 13 Mar 1998 19:04:14 EST  
From: qrp-l@Lehigh.EDU  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: QRP-L digest 1028

QRP-L Digest 1028

Topics covered in this issue include:

- 1) [5907] For Sale  
by "rohre" <rohre@arlut.utexas.edu>
- 2) [5908] need info  
by RangerSF5 <RangerSF5@aol.com>
- 3) [5909] Another "home brew key" project unearthed &c  
by nilsbull@juno.com (Nils R Young)
- 4) [5910] Re: Screwdriverama  
by "Bob Edwards, W4ED" <w4ed@flash.net>
- 5) [5911] Re: It takes a super antenna and expensive equipment to QS0..  
by Craig LaBarge <LaBarge\_C@compuserve.com>
- 6) [5912] Re: Req: How to obtain an XE reciprocal license?  
by Jim Lowman <jmlowman@ix.netcom.com>
- 7) [5913] Re: For Sale  
by David J Adams <adamsclan@netgate.net>
- 8) [5914] schematic for single diode, no power receiver  
by Lynn Simons <lsimons1@ix.netcom.com>
- 9) [5915] for sale  
by Lynn Simons <lsimons1@ix.netcom.com>
- 10) [5916] RE: Another off-topic science report  
by David Newmyer <davalnew@csn.net>
- 11) [5917] Re: GQRP - A new QRP kit?  
by Stanley Wilson <microres@crl.com>
- 12) [5918] Receiver - Design  
by Stan Wilson <microres@crl.com>
- 13) [5919] FOX SPOT  
by "tom palmer" <n1tp@worldnet.att.net>
- 14) [5920] 6 Meter Beacon  
by "Robert H. Sorge" <rsorge@phoenix.net>
- 15) [5921] Shy Fox to raise head  
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 16) [5922] Novice/Tech+ Sprint IAQ  
by camqrp@cyberg8t.com (Cam Hartford)
- 17) [5923] Re: Elmer 101, RF probes  
by "Wayne Barnhart" <wb7whi@triax.com>
- 18) [5924] 1.2 ghz CW transmitter for one of my elmers ???  
by pmk@juno.com (Patrick M Kvitkauskas)
- 19) [5925] Re: Elmer 101: Measuring Diodes

- by "George T. Baker" <w5yr@swbell.net>
- 20) [5926] I'm Getting There!  
by "George T. Baker" <w5yr@swbell.net>
- 21) [5927] re: O-Scope 10:1 Connectors  
by Chuck and Michele Snyder <csnyder@nextdim.com>
- 22) [5928] Re: I'm Getting There!  
by Paul Erickson <paul1@wizard.ucsfu.ca>
- 23) [5929] asteroids--several requested more info  
by "ALAN KAUL" <alan.kaul@worldnet.att.net>
- 24) [5930] plaques  
by "duane" <duane@flinet.com>
- 25) [5931] How to Become an Antenna Guru  
by "L. B. Cebik" <cebik@utkx.utcc.utk.edu>
- 26) [5932] Re: It takes a super antenna and expensive equipment to QSO..  
by jeverhar@camden.lmco.com
- 27) [5933] Test Drive - 706MkII, FOX, etc  
by Tim Ahrens <tahrens@inetport.com>
- 28) [5934] Re: Receiver - Design  
by Zack Lau <zlau@arrl.org>
- 29) [5935] TS-570 Kenwood  
by "CHARLES LESKIE" <CLESKIE@um-f1.umd.umich.edu>
- 30) [5936] April 98 QRP ARCI Quarterly  
by Monte Stark <ku7y@sage.dri.edu>
- 31) [5937] ZM-2 inside a Sierra  
by "Steve Galchutt" <n0tu@webaccess.net>
- 32) [5938] Re: 1.2 ghz CW transmitter for one of my elmers ???  
by Zack Lau <zlau@arrl.org>
- 33) [5939] Old Timey Crystals  
by Chuck Carpenter <w5usj@webwide.net>
- 34) [5940] Re: I'm Getting There!  
by Mike - W0TMW <crucis@sky.net>
- 35) [5941] RE: Old Timey Crystals  
by Kevin Muenzler <wb5rue@stic.net>
- 36) [5942] Re: TS-570 Kenwood  
by Mike - W0TMW <crucis@sky.net>
- 37) [5943] RE: Another off-topic science report  
by "Earl S. Mead" <k6esmead@pacbell.net>
- 38) [5944] RE: schematic for single diode, no power receiver  
by Kevin Muenzler <wb5rue@stic.net>
- 39) [5945] Thanks to the list again: GDO info  
by "rohre" <rohre@arlut.utexas.edu>
- 40) [5946] It's stupid antenna question time...  
by kd4zkw <kd4zkw@amsat.org>
- 41) [5947] Re: I'm Getting There!  
by Joe Gervais <vole@primenet.com>
- 42) [5948] From an Antenna geaux-reaux  
by jdenison@morelr.com (JOEL DENISON)
- 43) [5949] Novice/Tech+ Sprint/Hunt

by Joe Gervais <vole@primenet.com>  
44) [5950] Re: Novice/Tech+ Sprint IAQ  
by kd4zkw <kd4zkw@amsat.org>  
45) [5951] Re: It's stupid antenna question time...  
by Joe Gervais <vole@primenet.com>  
46) [5952] It takes a Super Antenna etc.  
by ROYGREGSON <ROYGREGSON@aol.com>  
47) [5953] DK3 UPDATE: Hams and trust (long)  
by Chris Cartwright <ccart@dns.vidtel.com>  
48) [5954] Re: It takes a Super Antenna etc.  
by LYN WILLIAMS <designserv@ipass.net>  
49) [5955] WTD: FR-7 or similar 3 way trade...  
by Niel Skousen <nskousen@scientech.com>  
50) [5956] ICOM Level Converter Schematic  
by Tim Ahrens <tahrens@inetport.com>  
51) [5957] FS: TS940SAT  
by Tim Ahrens <tahrens@inetport.com>  
52) [5958] Re: ICOM Level Converter Schematic  
by Roger Hightower <n7kt@earthlink.net>  
53) [5959] VFO can of worms  
by Mel Evans <MelEvansGM6JAG@compuserve.com>  
54) [5960] Re: VFO - Make it super stable  
by Stanley Wilson <microres@crl.com>  
55) [5961] RE: VFO can of worms  
by "Caro, Carlos" <carlos.caro@lmco.com>  
56) [5962] Re: ICOM Level Converter Schematic  
by "Bill Denton" <bdenton@tenet.edu>  
57) [5963] Newbie  
by Mike Martin <mmartin@netins.net>  
58) [5964] Re: VFO can of worms  
by "Paulette Quick, WB9VHF" <plquick@facstaff.wisc.edu>  
59) [5965] Re: ICOM Level Converter Schematic  
by "Mark E. Monninger" <markem@primenet.com>  
60) [5966] Re: It's stupid antenna question time...  
by "L. B. Cebik" <cebik@utkux.utcc.utk.edu>  
61) [5967] UTM, Universal Transverse Mercator, or getting lost with a  
detailed map for QRPTTF '98  
by wa5whn@juno.com  
62) [5968] Rotor Help? Ham-M  
by "ukii" <ukii@megsinet.net>  
63) [5969] Re: ICOM Level Converter Schematic  
by Roger Hightower <n7kt@earthlink.net>  
64) [5970] Re: Elmer 101: Measuring Diodes  
by Zack Lau <zlau@arrl.org>  
65) [5971] Re: DK3 UPDATE: Hams and trust (long)  
by David J Adams <adamsclan@netgate.net>  
66) [5972] DK3  
by Tellefsen Bob-CNSE97 <cns97@lmpsilo2.comm.mot.com>

- 67) [5973] Elmer101 Schematics  
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 68) [5974] Forwarding to Packet!  
by nq2rp@juno.com (B/BAMS Club Station)
- 69) [5975] Re: 2N2222 RX  
by "Jim Kortge, K8IQY" <jokortge@mci2000.com>
- 70) [5976] FOX: NOGLM log for Thurs 12 Mar 98 EST  
by "Buck, Preston D" <BuckPD@corning.com>
- 71) [5977] antenna up, despite gereaux  
by jdenison@morelr.com (JOEL DENISON)
- 72) [5978] Re: Newbie  
by Bob <hb\_elec@ids.net>
- 73) [5979] TS 520S or TS120S power  
by wd4nak@juno.com
- 74) [5980] The Balanced Ham (Long)  
by Joe Gervais <vole@primenet.com>
- 75) [5981] Re: The Balanced Ham (Long)  
by Kory Hamzeh <kory@avatar.com>

-----  
Date: 12 Mar 1998 18:08:24 -0500  
From: "rohre" <rohre@arlut.utexas.edu>  
To: qrp-l@Lehigh.EDU  
Subject: [5907] For Sale  
Message-ID: <n1322396338.43133@msmailgw1.arlut.utexas.edu>

From: Roy Lincoln on Thu, Mar 12, 1998 5:43 PM  
Subject: Re: For Sale

For Sale: one(1) Hamtronic Transmitting Converter XV-2 for 2 meters.  
          one(1) Hamtronic Transmitting Converter XV-4 for  
432(420-450)mhz.  
TYPICAL IN:1 mw.@28mhz, OUT-1-2 watts(cw/ssb)  
Both are in kit form with original instructions and unopened parts bags.  
\$55 each delivered or \$105 for both.  
This ought to give me the money to order an OHR-100 for 40 meters!  
Write: cc1595@cocentral.com  
Thanks-Roy Lincoln WA4DOU QRP ARCI #2330

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Date: Thu, 12 Mar 1998 19:43:48 EST  
From: RangerSF5 <RangerSF5@aol.com>  
To: qrp-l@Lehigh.EDU, qrp@qth.net  
Subject: [5908] need info  
Message-ID: <1530dea3.35088146@aol.com>  
Mime-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7bit

A few week ago I ran into a site that had a kit for the cubic incher and a small rx just for receiving W1AW and maybe a couple of kc + or -  
I lost the info.  
Can anyone out there help?  
Thanks in advance  
Bob  
WA2HQQ

-----  
Date: Thu, 12 Mar 1998 20:19:24 -0500  
From: nilsbull@juno.com (Nils R Young)  
To: QRP-L@Lehigh.EDU  
Subject: [5909] Another "home brew key" project unearthed &c  
Message-ID: <19980312.201927.10686.0.nilsbull@juno.com>

Fellow sufferers,

I was over at the university instrument shop the other day, talking about bringing in my meager effort at polishing brass and finishing steel when Jim Arehart, the guy who runs the place, told me that there had been an article in one issue of "The Home Shop Machinist " about building a Morse key from scratch.

Today in the campus mail I got a copy of the article. It's by Doug Ripka, whose call I did not look up, and it's in the January/February 1998 issue of the aforementioned magazine. Pretty neat stuff, too.

The article gives all the tricks & needed measurements, with many hints at what's very important and what's not, and also shows some other keys, among which is a J-37 and an enclosed contact ("spark proof?") Navy key and a British key (much like the one I have). There are also photos of three other home brew keys that the author had made, one of which

finished with the "engine turned" texture on the beam of the key.

Too bad I ain't got any room left in the garage, or I'd have to go out and get myself some stuff and try building one (or more) of these beasts. Like I need more stuff the way it is.

Anyway, that's the deal.

73

Nils

-----  
Nils R. Bull Young

La Estancia de los Guajolotes Sonrientes :: The Grinnin' Turkey Ranch  
WB8IJN &c :: The Tagalong Press :: email to: nilsbull@juno.com  
<http://www.fortunecity.com/victorian/mehetebell/94>

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-----  
Date: Thu, 12 Mar 1998 20:52:27 -0500  
From: "Bob Edwards, W4ED" <w4ed@flash.net>  
To: kd4zkw <kd4zkw@amsat.org>  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5910] Re: Screwdriverama  
Message-ID: <3508915B.4B33AB8E@flash.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

kd4zkw wrote:

>  
> I've heard alot of things about the zm-2. But, I know  
> nothing about it. Isn't it a tuner/swr meter ?

Yes, email Roy/W6EMT for more ZM-2 info : ROYGREGSON@aol.com

It is a QRP version of a Z-match type tuner with a very simple and effective SWR indicator as well. The indicator is a single LED, not a meter. LED goes dim on a low SWR.

Bob Kellogg, AE4IC, spent a lot of effort analyzing and

documenting QRP tuner performance. The ZM-1 (same as ZM-2) came in among the best. The results are in the QRP-L archives, I'm not sure how to get back to them. Maybe someone could email you direct with that exact info.

--

Bob 72/73

<http://www.qsl.net/w4ed>

W4ED nr Atlanta @EM73wt

...."QRP", more from less....

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[ \-----/
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Date: Thu, 12 Mar 1998 20:58:48 -0500  
From: Craig LaBarge <LaBarge\_C@compuserve.com>  
To: Jeff Gold <JGold@tntech.edu>  
Cc: QRP-L Mailing List <qrp-l@Lehigh.EDU>  
Subject: [5911] Re: It takes a super antenna and expensive equipment to QS0..  
Message-ID: <199803122059\_MC2-3690-44EC@compuserve.com>  
MIME-Version: 1.0  
Content-Transfer-Encoding: quoted-printable  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Disposition: inline

Jeff:

> Well talked to Craig, WB3GCK in Phoenixville, PA (PA has =  
> really weird city names), afte we talked for a bit he =  
> told me he was using a Ten Tec C22 (only DC receiver I =  
> ever could tolerate), then he told me he was using his =  
> rain gutter as an antenna.. he was 549, and the band =  
> wasn't feeling all that well.

It was a pleasure to make your acquaintance. The rainspout has been very kind to me. In fact, I always seem to have =

good luck running QRP into antennas that aren't supposed to =

work. :-) Actually, for the rainspout, a good ground and some counterpoise wires make the difference. =

By the way, if you think Phoenixville is a weird name... I =

work in King of Prussia, PA!

Take care & 73,

Craig WB3GCK

P.S.: For more on the 'spout...

[http://ourworld.compuserve.com/homepages/LaBarge\\_C/](http://ourworld.compuserve.com/homepages/LaBarge_C/)

-----  
Date: Thu, 12 Mar 1998 17:57:18 -0800  
From: Jim Lowman <jmlowman@ix.netcom.com>  
To: vintage@best.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5912] Re: Req: How to obtain an XE reciprocal license?  
Message-ID: <3508927E.651B6F09@ix.netcom.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Robert P. Okas wrote:

>  
> Hi Folks,  
>  
> I find my travels will take me "South of the Border" later this month  
> and I'd like to carry along some RF ejecting/detecting apparatus. Can  
> anyone offer some insight about how I go about operating in XE-land?

Hi, Bob. Call or e-mail ARRL.

I did so in late 1996, because we were going to Puerto Vallarta in January, 1997. They sent me more information than I could have imagined, including written translations in Spanish, people to contact who spoke English well, and so forth. It was a walkthrough of the entire process.

The only glitch I found was the US\$55 fee, which seemed a bit steep, especially for a one-week stay. As it turned out, our hotel was only three stories tall,



and we were on the second floor, but with a nice balcony. Were XE a  
rarer  
prefix, I might have bitten the bullet.

73 de Jim - AD6CW

-----  
Date: Thu, 12 Mar 1998 18:18:23 -0800 (PST)  
From: David J Adams <adamsclan@netgate.net>  
To: qrp-1@Lehigh.EDU, rohre@arlut.utexas.edu  
Subject: [5913] Re: For Sale  
Message-ID: <199803130218.SAA26333@u1.netgate.net>

I'd love to buy the 2m .

-----  
Date: Thu, 12 Mar 1998 19:59:16 -0600  
From: Lynn Simons <lsimons1@ix.netcom.com>  
To: qrp-1@Lehigh.EDU  
Subject: [5914] schematic for single diode, no power receiver  
Message-ID: <350892F3.6C0ADF4D@ix.netcom.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hi guys,

Not too long ago there was a thread about the single diode receiver that  
works without a battery or any other power source other than that  
contained in the radio wave itself. If any one has a copy of this could  
they please e-mail it to me. I have a friend at work that would love to  
make one of these for his 2 boys.

Thanks in advance.

Lynn, KJ3V  
Birmingham, AL

-----  
Date: Thu, 12 Mar 1998 20:08:05 -0600

From: Lynn Simons <lsimons1@ix.netcom.com>  
To: qrp-l@Lehigh.EDU  
Subject: [5915] for sale  
Message-ID: <35089504.2A8193CD@ix.netcom.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I have 2 items for sale that are not really qrp related but thought I would offer them here first.

The first is a Kenwood TS 530S transceiver. It covers all amateur bands from 160 M to 10 M including the WARC bands. It is not 100% solid state; it has a final tube and a driver tube. It has a 500 kHz CW filter with it, but no microphone. I am only CW here. It doesn't have a full coverage receiver in it like the 430 or 440. It is in great shape, no scratches, and works great. Price is \$400

The second item is a 2 M handie talkie. It is a Kenwood TH-21AT. This unit doesn't have any memories. The frequency is selected by a thumbwheel knob on the top. It has a brand new battery pack in it, comes with a cigarette lighter battery eliminator, and a wall charger. Works great. Price is \$50

I have the manuals for both rigs.

If interested you can reach me on the list, via e-mail, or phone:  
205-995-8747.

73/72,

Lynn, KJ3V  
Birmingham, AL

-----  
Date: Thu, 12 Mar 1998 19:40:25 -0700  
From: David Newmyer <davalnew@csn.net>  
To: qrp-l@Lehigh.EDU  
Subject: [5916] RE: Another off-topic science report  
Message-ID: <Version.32.19980312193305.00fbf990@lynx.csn.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

It will also be interesting to see how the various satellites hold up to the next two Leonids meteor showers. My understanding that this year or

next should be at a storm level.

Dave NOKM

-----  
Date: Thu, 12 Mar 1998 18:36:52 -0800 (PST)  
From: Stanley Wilson <microres@crl.com>  
To: Ian Liston-Smith <ianls@patrol.i-way.co.uk>  
Cc: G QRP List <qrp-l@blacksheep.org>, qrp-l@Lehigh.EDU  
Subject: [5917] Re: GQRP - A new QRP kit?  
Message-ID: <Pine.SUN.3.91.980312182415.23032B-100000@crl7.crl.com>  
Mime-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Ian,

I think you all ready know the answer to your questions. Yes it is possible to design and build modern equipment at considerable less than yur 400 pound figure. The basic circuits are known. The components are available. What is missing ? Packaging...

The fundamental item missing is "clever" ways to do the band switching and a little bit of good industrial design to make it look nice. SPRAT, etc. have had circuits to do all the necessary work.

Remember the Drake 2B. What made it really nice was the "clever" way to do variable bandpass tuning. It was a winner. Who ever comes up with a clever way to handle the band switch will solve the problems.

The circuits are available. Knowledge of designing and building both RF and audio filters is available (DSP could be a plug-in. The stability problems of the ole days are gone. We know how to design the circuits, to run the simulations etc. Just need a clever package (industrial designer)

-

So who going to be the first to come up with the bandswitched multi-band input and mixer stage. ????

de stan AK0B

On Thu, 12 Mar 1998, Ian Liston-Smith wrote:

>  
> Anyway, is there a market for an all HF bands (and perhaps 6 and 4 mtrs  
> too?) CW transceiver kit? Something based along the lines of the HW7/8/9 or  
>  
> Using modern components (ie. RF chips, though not necessarily using a  
>  
> Perhaps it's time to have one last try at a design. After all, we are  
> probably the last generation of amateurs who will frequently use CW. If a  
> good transceiver cannot be designed for this mode by now with all the past  
> experience of professionals and amateurs - then will it ever? My minimum  
> draft spec would be as follows:  
>  
> Decent superhet receiver, with intermodulation free dynamic range of at  
> least 85dB that does not require an attenuator across the antenna input to  
> cope at night on 40m.  
>  
> Is such a transceiver a tall order for late 20th Century technology using a  
> transmission mode that is 100 years old? I think not. But at what price?

-----  
Date: Thu, 12 Mar 1998 22:09:37 -0600  
From: Stan Wilson <microres@crl.com>  
To: qrp-l@Lehigh.EDU  
Subject: [5918] Receiver - Design  
Message-ID: <3508B181.3F7A@crl.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Designing of a receiver requires more than just selection of the mixer  
IC or balanced mixer.

New approach to receiver design

In the past couple of years there have been some excellent designs of  
simple homebrew receivers for portable qrp operation. However,  
they all fail when it comes to strong-signal capability.

We often read e-mail messages about so-and-so QRO signal or Shortwave  
broadcast wiping out QRP QSO.

The problem may be the receiver front end in the QRP transceiver or  
receiver. We can not correct the poor selectivity in the front end  
with just sharp xtal filters and DSP circuits on the tail end.

Just take a look at the numbers.  $Q = \text{desired freq} / \text{delta frequency}$

So what Q do we need in the front end ? Believe me when I say that a simple single tuned circuit or low pass filter front end will not give you what you really need.

For example: What if we had a Q of 1000 in the input stages of our new homebrew rig. We built it for 30 meters. We only have about 25 khz of usable freq due to our sharing with both commercial and amateur signals. What Q do we need ? 10, 100, heaven help us if we need 1000.

Ok....  $Q = 10 \text{ MHz} / 25 \text{ khz} = 400$  and that is just to limit us to signals in the 30 meter band. At 10 khz bandwidth in the RF stage we need a Q of 1000.

When are we going to see a Cohn filter on the front end to eliminate the signals before we amplify them ?

The present designs amplify the signal 5 khz up and down the band the same amount as the desired signal before they are fed to the IF stage. So that 1 uV signal 5 khz away may be 20 uV when it gets to the IF and the 0.1 uV signal on freq may only be 2 uV. Even if the IF stage is down by a gain of -10 at the interfering signal, they both come out of the IF at the same level..

Something to think about.

de stan AK0B

-----  
Date: Thu, 12 Mar 1998 11:14:32 -0500  
From: "tom palmer" <n1tp@worldnet.att.net>  
To: <qrp-1@Lehigh.EDU>  
Subject: [5919] FOX SPOT  
Message-ID: <19980313041324.AAA19945@default>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Bob, W03B, in Cal. is on 7.037.90 with FB Sigs and FB operation. 72, N1TP, Tom, in Fl.

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Date: Thu, 12 Mar 98 23:51:43 PST  
From: "Robert H. Sorge" <rsorge@phoenix.net>  
To: qrp-l@Lehigh.EDU  
Subject: [5920] 6 Meter Beacon  
Message-ID: <Chameleon.980312235934.rsorge@phoenix.net.phoenix.net>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

I am looking for a 6 meter transmitter kit or plans to build a cw beacon that will output less than 5 watts. A couple of watts output would be fine. Any information will be appreciated.

The freq. desired will be 50.070-080Mhz range Also any info on an IDer to go with this transmitter is needed as well.

Thanks,  
72 de Bob

-----  
Name: Robert H. Sorge - KC5FMZ QRP-L#910,NORCAL#793,ARCI#96033  
E-mail: rsorge@phoenix.net  
Date: 3/12/98  
Time: 11:51:43 PM  
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-----  
Date: Thu, 12 Mar 1998 23:27:43 -0500  
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>  
To: "INTERNET:bobwhite@accesscom.com" <bobwhite@accesscom.com>, "Doc W.D. Lindsey/K0EVZ" <70511.3041@compuserve.com>,  
QRP-L Discussion Group <QRP-L@Lehigh.EDU>  
Subject: [5921] Shy Fox to raise head  
Message-ID: <199803122332\_MC2-368B-F694@compuserve.com>  
MIME-Version: 1.0  
Content-Transfer-Encoding: 7bit  
Content-Type: text/plain; charset=us-ascii  
Content-Disposition: inline

Bob:

Wow!--what a thrill to hear you come back to my 3 watt signal tonight. You had a terrific 569 signal here in SE MN. And man, were the hunters ever hungry and yelping tonight. Wondered if 3 watts would be enough. Luckily it worked out FB :-).

Setup = Ten-Tec Omni V thru ZM-2 tuner to a HB dipole up 28' fed with 300-ohm window line. The longer I use this window line, the more impressive it becomes. Has greatly improved the operation here. The smaller line is proving far easier to handle in winds and ice than the larger 450-ohm stuff.

Sounds like you were quite busy tonight. At the rate you started out, I expect you will set a record. Hope so! Great job, Bob. Thanks again.

72/73,

--Doc Lindsey/K0EVZ                Rochester, MN--Home of the Mayo Clinic.  
MWBC  
519-16th Street SE  
Rochester, MN 55904  
507/289-5108 (eves)

-----  
Date: Thu, 12 Mar 1998 20:53:52 -0800 (PST)  
From: camqrp@cyberg8t.com (Cam Hartford)  
To: qrp-l@Lehigh.EDU  
Subject: [5922] Novice/Tech+ Sprint IAQ  
Message-ID: <199803130453.UAA20138@key.cyberg8t.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Ladies and Gents,

Back by unpopular demand, here is another collection of Infrequently Asked Questions regarding the upcoming Novice/Tech+ Sprint.

Q: I'm a General class ham, but would really like to get in on the fun. Can I, huh?

A: Certainly. The whole idea here is to get as many General and above types to slide up to the Novice band segments to give the newer hams some contest operating practice.

Q: I'm a Novice class ham. Are all these General and above types going to descend on our band segments and send code at impossibly high speeds?

A: Certainly not. They are QRPers and Gentlepersons, and will reduce their code speed to match whomever they are working, as all good hams do.

Q: What is the exchange?

A: It goes like this - send the other guy's RST, your State/Province/Country, then your name.

Q: What if I get nervous and forget my name?

A: No problem. Just think up a good one, write it down, and use it for the whole contest. Bert, Zeke and Bubba are good ones that come to mind.

Q: Who can work Whom?

A: Yes, and Who can work What or Where or anyone else for that matter. Everyone can work everyone else. The only difference is that it pays more to work the N/T+ stations. The playing field has been deliberately tilted in their favor.

Q: How do I know what class the other guy is?

A: The Novices will sign their call followed by "/N" and the Techs will sign their calls followed by "/T". Everyone else falls into the category of "Everyone Else" and won't get to do anything special with their calls. Think of it as a Special Day for the N/T+ folk.

Q: What do I get if I win?

A: Sorry to say, I gave away all of our Junque Food last Halloween. We will hand out a bunch of gorgeous ARCI Contest certificates, but mostly you'll come away with some valuable operating experience under your belt.

See you there -

Cam N6GA

QRP ARCI Contest Manager

-----

QRP ARCI NOVICE/TECH+ SPRINT

Date/Time:

March 15, 1997; 2000 - 2400 Z

Exchange: RST, State/Province/Country, Name

Novices sign CALL/N, Tech+ sign CALL/T

QSO Points:

N/T+ to N/T+ = 25 Points

N/T+ to Non N/T+ = 10 Points

Non-N/T+ to Non N/T+ = 5 Points

Power Multiplier:

0 - 250 MW = X 15;

250 MW - 1 Watt = X 10

1 W - 5 W = X 7;

Over 5 W = X 1.

Suggested Frequencies:



80 Meters	3710 KHz
40 Meters	7110 KHz
15 Meters	21110 KHz
10 Meters	28110 KHz

Score:

Points (total for all bands) X Power Multiplier

Entries are welcome via E-Mail to CamQRP@cyberg8t.com, or by mail to:

Cam Hartford, N6GA  
1959 Bridgeport Ave.  
Claremont, CA 91711

-----  
Date: Thu, 12 Mar 1998 17:55:02 -0800  
From: "Wayne Barnhart" <wb7whi@triax.com>  
To: <MelEvansGM6JAG@compuserve.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [5923] Re: Elmer 101, RF probes  
Message-ID: <199803130455.UAA24978@smtp.triax.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Dont forget to change the probes resistance for the resistive input of the analog meter.

Wayne WB7WHI  
Spokane, Wa.

-----  
Where this is the case, then you will be better off using the probe with some form of analogue meter rather than a digital meter if one is available to you. The obvious reason for this is simply the sampling time of digital meters is too "slow" to enable you to see a peak or a dip. In this case, a simple rf sniffer connected to a 100uA movement is likely to be of great help if you don't have an old Avo 8 (Simpson? in American) to see the needle moving.

72 and 73 de Mel  
GM6JAG  
Edinburgh, Scotland UK.

Home of the last HW9

G-QRP 1283 EA-QRP 88 ARRL and the likes

Area Chairman, British Caravanner's Club, Scotland.

-----  
  
-----  
  
Date: Fri, 13 Mar 1998 16:30:31 +0000  
From: pmk@juno.com (Patrick M Kvitkauskas)  
To: qrp-1@Lehigh.EDU  
Subject: [5924] 1.2 ghz CW transmitter for one of my elmers ???  
Message-ID: <19980313.163032.6598.3.pmk@juno.com>

Anyone have any suggestions for a 1.2ghz CW transmitter say  
in a kit or a nice design that one get parts for ?

He is looking for something in the 1 to 10 watt range for operating  
the sats. Oh yes it needs to be variable as well as those guys try  
to run as little as possible to save the batteries on those birds.

Those guys are really cool and are really QRP as well.  
I have the pleasure to know a bunch of the Phase 3D boys and  
the gent looking for the TX is the old gray haired gent in the AMSAT  
picture looking through the satellite. He spends a lot of time down  
there working on the bird and also they have a nice station there  
as well. Pretty cool working someone half way around the world  
on say a hundred mw.

He is getting on in years and I volunteered building him the transmitter.

I think he is still trying to get me involved with the satellite stuff  
but as we  
know that is almost a hobby by itself.

Thanks es 72/73 de Patrick KD40BQ

AR

-----  
You don't need to buy Internet access to use free Internet e-mail.  
Get completely free e-mail from Juno at <http://www.juno.com>  
Or call Juno at (800) 654-JUNO [654-5866]

-----  
Date: Thu, 12 Mar 1998 23:13:38 -0600  
From: "George T. Baker" <w5yr@swbell.net>  
To: launerb@crl.com  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5925] Re: Elmer 101: Measuring Diodes  
Message-ID: <3508C082.3A012936@swbell.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Bill, was the EICO a VTVM or a plain battery-operated VOM? My remarks were addressed to the VOM-class of meters. I would expect that the VTVM would act like the DMM, which your experiment confirms.

Also, I should have mentioned that the apparent polarity reversal occurs with the conventional VOM only on the "low ohms" scale where the meter reads full scale for an open circuit and reads zero (all the way to the left) for a short circuit.

Sorry for any confusion.

William H. Launer wrote:

>  
> George wrote:  
>  
> >but most analog multimeters set to measure resistance produce  
> >a positive voltage on the BLACK or normally NEGATIVE test lead  
> >relative to the RED or normally POSITIVE test lead.  
>  
> I just checked the polarity of my old Eico 565 multimeter, and the red  
> lead is POSITIVE on the Ohms scales. My Sperry DVM (DM-8400) is the same.  
> I normally use the Eico for checking diodes and transistors. I prefer  
> the analog meter for this because the DVM takes too long to respond. The  
> bottom line is: use what you're comfortable with, and check the polarity.  
> I don't think it will hurt the device under test, but can mis-identify an  
> unknown npn device as a pnp device (or vice versa).  
>  
> 72/73, Bill wb0cld  
>  
> Bill Launer  
> St. Charles, MO  
> launerb@crl.com  
> wb0cld@wb0cld.ampr.org [44.46.66.25]  
> qrp-l #279           qrp arco #3551  
> Grid Square EM48RT

--

73, George  
Amateur Radio W5YR  
QRP-L #1373  
QRP ARCI #9583  
AutoPOWER Systems  
Fairview, TX

-----

Date: Fri, 13 Mar 1998 00:07:21 -0600  
From: "George T. Baker" <w5yr@swbell.net>  
To: qrp-l@Lehigh.EDU  
Subject: [5926] I'm Getting There!  
Message-ID: <3508CD19.2F0BA1C5@swbell.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

As you can see from my very high QRP-L number (1373), I am new to this flashlight-power-level mode of operating even though I am soon entering my 53rd year in ham radio.

I have been reading all these stories of various contacts under very unusual conditions, etc. using very low power. At first I was more than a little suspicious, but now I am beginning to understand that you guys are on to something!

First experience was working Doc (K0EVZ), the Fox, back in February and getting a 599 report with 5 watts!

Second has been hearing all these QRP QSO's with the S-meter jumping up well about S9 for < 5 watt signals. Heard a couple of Zero's the other night going at it near 7040. Both were kicking the meter up to at least S9+20 db constantly. Where are all these "weak" signals barely out of the noise?

Lastly, I was listening to 40 last night when I heard ZK1DI calling CQ DX on 7003.0 and getting no response. I cranked the IC-765 back down to 5 watts and gave him a call along with a couple of other stations. He came back to a W6 and then he called me! Gave me a 599 report, but that was just the usual contest-contact nonsense report. But, the guy heard my 5 watts into an Extended Double Zepp on 40 in all the QRM and heard me well enough to get the call right and then call me back.

Made a believer out of me! This stuff really works. Thanks for adding

new life to ham radio for another old timer.

Wonder if the 765 will ever get back to its normal 100+ watts of output?

--

73, George  
Amateur Radio W5YR  
QRP-L #1373  
QRP ARCI #9583  
AutoPOWER Systems  
Fairview, TX

-----

Date: Thu, 12 Mar 1998 22:27:52 -0800  
From: Chuck and Michele Snyder <csnyder@nextdim.com>  
To: QRP <qrp-l@Lehigh.EDU>  
Subject: [5927] re: O-Scope 10:1 Connectors  
Message-ID: <3508D1E8.6F94409B@nextdim.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hi,

I somehow lost the current message by someone wanting to swap some o-scope 10:1 connectors for some qrp stuff. I don't have any qrp stuff to trade, mainly due to the fact that I am still wet behind the ears new to ham radio, but I would be interested in obtaining or purchasing (with a reasonable price) a set of o-scope connectors. For the public record I own a: B&K Precision 30MHz O-Scope (Model: 1479B).

I hope the gentlemen whom posted that message responds because I currently only have one connector for either A or B channel. Thanks.

I finally got my ICOM-32AT Radio and had a crash course on learning how to program it this evening, thanks to Wayne. My ham test is this Saturday. Also, thank you Paul Lundy for offering the great buy on my first ham radio gear! And, thank you to Paul Harden for the autographed "Data Book for Homebrewers and QRPers."

(73s)

--

Chuck Snyder (No\_Call\_Sign\_Yet)  
<http://www.nextdim.com/users/csnyder/index.htm>  
QRP-L #1462  
Spokane, WA

-----  
Date: Thu, 12 Mar 98 22:56:04 PST  
From: Paul Erickson <paul1@wizard.ucs.sfu.ca>  
To: w5yr@swbell.net  
Cc: qrp-1@Lehigh.EDU (qrp)  
Subject: [5928] Re: I'm Getting There!  
Message-ID: <9803130656.AA22484@wizard.ucs.sfu.ca>

Hi George,

Welcome to the fun. Nice catch on the ZK1DI. I worked him tonight after getting the fox. (5 watts and 50ft vertical). 100 watts is fun once and a while, but most of the time it is BORING!!!!

>  
> I have been reading all these stories of various contacts under very  
> unusual conditions, etc. using very low power. At first I was more than  
> a little suspicious, but now I am beginning to understand that you guys  
> are on to something!

Now, would we lie?-)

>  
> Second has been hearing all these QRP QSO's with the S-meter jumping up  
> well about S9 for < 5 watt signals. Heard a couple of Zero's the other  
> night going at it near 7040. Both were kicking the meter up to at least  
> S9+20 db constantly. Where are all these "weak" signals barely out of  
> the noise?

Signals were good tonight. At times, the fox was a solid s9 up here in B.C.

>  
> Lastly, I was listening to 40 last night when I heard ZK1DI calling CQ  
> DX on 7003.0 and getting no response. I cranked the IC-765 back down to  
> 5 watts and gave him a call along with a couple of other stations. He  
> came back to a W6 and then he called me! Gave me a 599 report, but that  
> was just the usual contest-contact nonsense report. But, the guy heard  
> my 5 watts into an Extended Double Zepp on 40 in all the QRM and heard  
> me well enough to get the call right and then call me back.

>  
> Made a believer out of me! This stuff really works. Thanks for adding  
> new life to ham radio for another old timer.  
>  
> Wonder if the 765 will ever get back to its normal 100+ watts of output?

Watts are for wimps ;-)...

cheers, Paul VE7CQK/email: paul1@wizard.ucs.sfu.ca  
>

-----  
Date: Thu, 12 Mar 1998 23:44:21 -0800  
From: "ALAN KAUL" <alan.kaul@worldnet.att.net>  
To: <qrp-1@Lehigh.EDU>  
Subject: [5929] asteroids--several requested more info  
Message-ID: <19980313074436.AAA11328@oemcomputer>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Planning to bounce your qrp signal off a near-earth asteroid but don't know where to point the antenna?

Try [http:// huey.jpl.nasa.gov/~spravdo/neat.html](http://huey.jpl.nasa.gov/~spravdo/neat.html)

This is the NEAR EARTH ASTEROID TRACKING SITE (a heavy duty science --nerd-- site) with ephemeris data for tracking some of the various objects -- including the latest discoveries.

It also has some images you can click on, some animation you can download, etc. Learn, for example, there's a "near miss" going to occur in March 1998 ("near miss" here mean 3-million-miles). I don't think you'll be able to work Earth-Asteroid-Earth on that one (360-meters in diameter and harder to track than the moon!), but keep reading cuz one of these days, it's bound to happen!

Best 73/72 de alan  
Alan Kaul, W6RCL, LaCanada-Flintridge, CA  
<http://home.att.net/~alan.kaul/qrp.html>  
alan.kaul@worldnet.att.net  
w6rcl@amsat.org

-----  
Date: Fri, 13 Mar 1998 02:44:04 -0500  
From: "duane" <duane@flinet.com>  
To: "qrp-1 group" <QRP-L@Lehigh.EDU>  
Subject: [5930] plaques  
Message-ID: <01bd4e53\$cbbaa1e0\$6a180ed0@ab4be.earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain;

charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Hey guys and gals I found a really cool site that sells plaques.  
they make it using a copy of your FCC license. Very nice plaques  
high quality. you can check it out a link is on my ham radio page.  
or go directly there at  
<http://www.awards-r-us.com/wireless/products.cfm?siteid=3121>  
or my page at <http://www.flinet.com/~duane/ham/ham.html>  
they may even make a QRP plaque if enough of us ask for one ?

73's  
duane AB4BE QRPL#710

-----  
Date: Fri, 13 Mar 1998 08:51:05 -0500 (EST)  
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>  
To: towertalk@contesting.com, antennas@qth.net, QRP-L List <qrp-l@Lehigh.EDU>, gqrp-l@blacksheep.org  
Subject: [5931] How to Become an Antenna Guru  
Message-ID: <Pine.GS0.3.96.980313084503.27379A-100000@moe>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Dan Warren, an Air Force antenna engineer, has produced (and continues to enlarge) one of the very best compact treatment of antenna fundamentals that I have come across. His 3-D color pattern illustrations are worth a trip to his site, but the text itself, even without the illustrations, is well-worth reading, whether you are a beginner or advanced antenna addict.

URL: <http://www.borg.com/~warrend/guru.html>

Or, you can substitute index.html as the last element and start at Dan's home page.

Or, you can make a direct link from my radio page, where I have added Dan's page to the antenna-related links, just above the collection of notes.

-73-

LB, W4RNL

L. B. Cebik, W4RNL	/\	/\	*	/	/	/	(Off) (423) 974-7215
1434 High Mesa Drive	/	\	\	----	/\	---	(Hm) (423) 938-6335



Knoxville, Tennessee    /\    \    \ \    /    / ||    /    (FAX) (423) 974-3509  
37938-4443    USA    /    \    \    \ \    ||    cebik@utk.edu  
URL: <http://funnelweb.utcc.utk.edu/~cebik/radio.html>

-----  
Date: Fri, 13 Mar 1998 09:38:17 -0500 (EST)  
From: jeverhar@camden.lmco.com  
To: qrp-1@Lehigh.EDU  
Cc: jeverhar@camden.lmco.com  
Subject: [5932] Re: It takes a super antenna and expensive equipment to QSO..  
Message-ID: <9803131438.AA011113@train11.CAMDEN.LMCO.COM>

Craig, WB3GCK wrote:

>By the way, if you think Phoenixville is a weird name... I =  
>  
>work in King of Prussia, PA!

Well there are even stranger names. Thsoe of us who have lived in Lancaster County know of a number of them. I won't elaborate, but there are jokes whose punch lines make use of several outstanding Lanco town names in giving driving directions:

Intercourse  
Paradise  
Bird In Hand  
Blue Ball

It is left to the interested student to link them...

72/73,

Joe E., N2CX

-----  
Date: Fri, 13 Mar 1998 08:37:15 -0600  
From: Tim Ahrens <tahrens@inetport.com>  
To: qrp-1@Lehigh.EDU  
Subject: [5933] Test Drive - 706MkII, FOX, etc  
Message-ID: <3509449B.8F63141C@inetport.com>

MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Well, the test drive started about 12:30pm here in Austin... Cranked it up to see what it would do, and well, what can I say.. "Hey Ma, this little puppy followed me home, can I keep it?"

Got out to the shack about 9:15pm local, about 45 minutes before I needed to start sniffing for the fox. Hooked it up to the power supply, and everything came alive. The menus will take a bit of getting used to, but it sure has a lot of bells & whistles in that little box!

Ok, lemme see, how to make it do code? You know, I bet it's got a different paddle connection than the Sierra. Nope, you can swap em through a menu! Switch the antenna to dummy load & crank it up... pegs the needle... oops, that was the 30 watt scale.. looks like rated power is no problem. Now, let's see, how loooooow can you go? In the 'L' power mode, gets 2.5 watts!! hooray.

Time for the fox, yep, there he is.. wow, lots of hounds. I drop the call now and again, while looking through the manual. Finally bagged him through the din... the w5f? was a happy sound! Thanks for being the Fox Bob!!

Ok, that's done, read some more... tune around... hey, F3NB - Andy is calling cq from Tolouse... hmmm sure - we had a short chat.. nice signal.. what's on the upper bands? 20 meters still has some activity.. hey, let's try ssb (the dark side of ham radio :-)... dummy load, USB, L power,, whistle... about 3 watts.. OK, who can I call? Well, lookie here.. 9X0A, here is W5FN/QRP, how do you copy? Had another nice quick DX chat. From that point, I started playing with the 2 meters side, and BC band, and FM broadcast, etc, etc.

It was a happy night at this Fox Nabbers home.. a warmly glowing radio in front of me, the Fox, DX, mellow music from a distant broadcast station... zzzzzz

Thanks to all who told me about their thoughts of the 706, it looks like it's gonna be a nice radio.

cu

Tim W5FN

-----  
Date: Fri, 13 Mar 1998 09:54:27 -0500  
From: Zack Lau <zlau@arrl.org>  
To: qrp-l@Lehigh.EDU  
Subject: [5934] Re: Receiver - Design  
Message-ID: <350948A3.1A@arrl.org>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

A rather old idea. See page 5-33 of QRP-power or the December 1991 QST  
on an 8 kHz wide LC RF filter for 3560 kHz.--Zack W1VT

-----  
Date: Fri, 13 Mar 1998 09:58:37 EST5EDT  
From: "CHARLES LESKIE" <CLESKIE@um-f1.umd.umich.edu>  
To: qrp-l@Lehigh.EDU  
Subject: [5935] TS-570 Kenwood  
Message-ID: <109BECC3017@um-f1.umd.umich.edu>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT

I was reading that the Kenwood TS-570 will crank down from 100  
watts, to 5 watts right out of the box. Does anybody have any  
experience or comments about this rig? I've had my eye on it.

Chuck

-----  
Date: Wed, 11 Mar 1998 19:05:33 -0800 (PST)  
From: Monte Stark <ku7y@sage.dri.edu>  
To: QRP-L <qrp-l@Lehigh.EDU>  
Subject: [5936] April 98 QRP ARCI Quarterly  
Message-ID: <Pine.SUN.3.90.980311185731.2213A-1000000@vortex>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi All,

Here is the Table of Contents for the April 98 QRP ARCI Quarterly.

I seem to be having some problems with the QRP-L getting through. I hope this works.

(Maybe someone could let me know)

Thanks, cul,

\*\*\*\*\*

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\*\*\*\*\*

The down side is that I am a bit late getting this to the printer.  
So it might run a week late or so. But it will be there! :-)

Please notice the reader survey. Please take the time to fill  
it out to help us know what you would like to see and how you  
feel!

cul,

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....  
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....  
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

-----

Date: Fri, 13 Mar 1998 08:15:20 -0700

From: "Steve Galchutt" <n0tu@webaccess.net>  
To: "\"Low Power Amateur Radio Discussion\"" <qrp-1@Lehigh.EDU>  
Subject: [5937] ZM-2 inside a Sierra  
Message-ID: <00dd01bd4e92\$dba5a660\$41a8a3cc@SG2939M.webaccess.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Hi Gang.....Just wondering if I asking for trouble by building an antenna tuner (like the ZM-2) into my Sierra. Is there possibilities of standing waves or something getting back into the rig and messing up the mixer or PA or something else? My thinking is if I've get everything into one box....like my Sierra... Then I only have to remember to bring my key/paddle, wire and battery. And I'm likely to spend more time on the air instead of fussing with cables and other little boxes. This might cut down on the number of times I leave something behind that prevents me from getting on the air. Although, I must say it's caused me to become very creative at solving the problem of 'making do with what you have on hand'. Which kinda goes along with my QRP nature. Like the time I had to tape several different types of batteys together form my headlamp, razor, and HT to power up the rig because knuckle head forgot his gelcell. That's why, when I heard about the nail in the tree antenna, I said to myself 'hmmm better save this trick for when I forget to bring the wire! Sorry for drifting off subject .... back to my question .....will it hurt to mount a tuner instead my pride and joy (my Sierra) ?? huh?

72...Steve

-----  
n0tu - solar powered QRP & wire antennas @ 7,200' ASL  
Monument,Colorado - Grid Sq DM79nb  
email: n0tu@webaccess.net

-----  
Date: Fri, 13 Mar 1998 10:27:07 -0500  
From: Zack Lau <zlau@arrl.org>  
To: qrp-1@Lehigh.EDU  
Subject: [5938] Re: 1.2 ghz CW transmitter for one of my elmers ???  
Message-ID: <3509504B.259F@arrl.org>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Try Kanga LM2 for 2M driving a Down East Microwave transverter and

power amplifier. Both companies have WWW pages. This may be an 80% design--a bit of work may be required to get a high quality signal with no clicks or chirps... I use a 1 k ohm trimpot and 100 ohm resistors to make 2M IF attenuators--Zack W1VT

-----  
Date: Fri, 13 Mar 1998 09:46:34 -0600  
From: Chuck Carpenter <w5usj@webwide.net>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [5939] Old Timey Crystals  
Message-ID: <3.0.1.32.19980313094634.006b5768@mail.webwide.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

I'm not familiar with the carborundum crystal mentioned in a previous post.  
I can't find any info on it.

I had a Galena (PbS) crystal with \*cats whisker\* and lead holder once upon a time. The whisker was adjusted for best sensitivity by moving it around the surface of the PbS chunk.

Does the carborundum crystal work in a similar fashion?

72/73 -- Chuck, W5USJ, EM22cv  
Rains County, Eagle Capitol of Texas  
ARCI # 5422, QRP-L # 1306, FISTS # 3984

-----  
Date: Fri, 13 Mar 1998 09:46:31 -0600  
From: Mike - W0TMW <crucis@sky.net>  
To: w5yr@swbell.net  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5940] Re: I'm Getting There!  
Message-ID: <350954D7.FC242138@sky.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

George T. Baker wrote:

>  
> As you can see from my very high QRP-L number (1373), I am new to this  
> flashlight-power-level mode of operating even though I am soon entering  
> my 53rd year in ham radio.

Snip!

As you can see below, my number is even higher than yours!

> Wonder if the 765 will ever get back to its normal 100+ watts of output?

I'm about to build an OHR 4020. In the meantime, I crank my TS-570S down to 5 watts. You should see the response I get with QRP RTTY!

>  
> --  
> 73, George  
> Amateur Radio W5YR  
> QRP-L #1373  
> QRP ARCI #9583  
> AutoPOWER Systems  
> Fairview, TX

--

```
=====
Mike Watson, W0TMW          QCWA Mbr# 28651, MidContinent Chapter #35
Raymore, Missouri, USA     Grid: EM28st, ARS# 352, QRP-L# 1849
http://www.sky.net/~crucis  E-mail: crucis@sky.net
=====
```

-----

Date: Fri, 13 Mar 1998 10:00:06 -0600  
From: Kevin Muenzler <wb5rue@stic.net>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>, "'w5usj@webwide.net'"  
<w5usj@webwide.net>  
Subject: [5941] RE: Old Timey Crystals  
Message-ID: <01BD4E66.CD50D7A0@muenzlerk.uthscsa.edu>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit

On w5usj@webwide.net, Chuck Carpenter[SMTP:w5usj@webwide.net] wrote:

> I'm not familiar with the carborundum crystal mentioned in a previous post.  
> I can't find any info on it.  
>  
> I had a Galena (PbS) crystal with \*cats whisker\* and lead holder once upon  
> a time. The whisker was adjusted for best sensitivity by moving it around  
> the surface of the PbS chunk.  
>  
> Does the carborundum crystal work in a similar fashion?



>  
> 72/73 -- Chuck, W5USJ, EM22cv  
> Rains County, Eagle Capitol of Texas  
> ARCI # 5422, QRP-L # 1306, FISTS # 3984  
>  
>

Carborundum is a type of ruby crystal. I think it is also known as Silicon Carbide. They work very much like quartz crystals but are not quite as temperature stable. They usually had to be in a crystal oven where the temperature was quite stable.

Kevin, WB5RUE

-----  
Date: Fri, 13 Mar 1998 10:08:06 -0600  
From: Mike - W0TMW <crucis@sky.net>  
To: CLESKIE@um-f1.umd.umich.edu  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5942] Re: TS-570 Kenwood  
Message-ID: <350959E6.61C779E1@sky.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

You are absolutely correct. The TS-570 has a "pwr" button on the front panel. Push that and then you can crank the power down to 5 watts. My MFJ tuner shows about 4.5 watts to the antenna.

Mike - W0TMW

CHARLES LESKIE wrote:

>  
> I was reading that the Kenwood TS-570 will crank down from 100  
> watts, to 5 watts right out of the box. Does anybody have any  
> experience or comments about this rig? I've had my eye on it.  
>  
> Chuck

--

=====  
Mike Watson, W0TMW                      QCWA Mbr# 28651, MidContinent Chapter #35  
Raymore, Missouri, USA                  Grid: EM28st, ARS# 352, QRP-L# 1849  
<http://www.sky.net/~crucis>              E-mail: crucis@sky.net  
=====

-----  
Date: Fri, 13 Mar 1998 08:06:33 -0800  
From: "Earl S. Mead" <k6esmead@pacbell.net>  
To: qrp-1@Lehigh.EDU  
Subject: [5943] RE: Another off-topic science report  
Message-ID: <35095989.682E546D@pacbell.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hi All:

On CNN last night someone said that after recalculating the path of the astroid by NASA, the closest it would come to the earth would be 600,000 miles and not present a danger to the earth. If was to come too close, technology would allow us to attempt a diversion by a nuclear explosion by that time anyway.

Back to qrp-1.

--

73s, CUL, Earl, K6ESM

North Hills Radio Club, the BEST amateur radio club in the world!!!  
<http://www.k6is.org>

The pessimist curses the darkness in the tunnel; the optimist thinks a light is at the end of the tunnel; the opportunist finds the light and turns it on; the explorer sees railroad tracks; the developer builds a station; the entrepreneur sells tickets for the train; the consumer buys a ticket and rides the train. Ah, the wonder of it all.

"Remember the ARK was built by amateurs; the TITANIC was built by professionals": Mark Lowry (Gaither Vocal Band) in 'Down by the Tabernacle.'

-----  
Date: Fri, 13 Mar 1998 10:16:03 -0600  
From: Kevin Muenzler <wb5rue@stic.net>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>, <'lsimons1@ix.netcom.com' <lsimons1@ix.netcom.com>  
Subject: [5944] RE: schematic for single diode, no power receiver  
Message-ID: <01BD4E69.085D3260@muenzlerk.uthscsa.edu>  
MIME-Version: 1.0  
Content-Type: multipart/mixed; boundary="----=\_NextPart\_000\_01BD4E69.085D3260"

```
-----=_NextPart_000_01BD4E69.085D3260
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit
```

On lsimons1@ix.netcom.com, Lynn Simons[SMTP:lsimons1@ix.netcom.com] wrote:

```
> Hi guys,  
>  
> Not too long ago there was a thread about the single diode receiver that  
> works without a battery or any other power source other than that  
> contained in the radio wave itself. If any one has a copy of this could  
> they please e-mail it to me. I have a friend at work that would love to  
> make one of these for his 2 boys.  
>  
> Thanks in advance.  
>  
> Lynn, KJ3V  
> Birmingham, AL  
>  
>
```

Yes, I know it's primitive but hey, I'm not an artist, nor do I play on the radio.

You need a LONG antenna.

Connect a diode (1N34) in series with the antenna to a crystal ear plug. Connect the other end of the crystal ear plug to a good ground. You might also want to put a .001uf capacitor across the ear plug. That's it. You can refine it by putting a tuning circuit if you want to. Without it you will pick up every close AM station.

You can even experiment with different types of transistors using them as diodes. Try some germanium and silicon ones. You will find that some work better than others. Then try connecting the transistors in different ways. ie. emitter/base, emitter/collector, base/collector and see what gives the best performance.

Kevin, WB5RUE

```
-----=_NextPart_000_01BD4E69.085D3260
Content-Type: image/jpeg; name="crystal.jpg"
Content-Transfer-Encoding: base64
```

[illegible]

```
----- = NextPart 000 01BD4E69.085D3260--
```

-----

Date: 13 Mar 1998 10:24:45 -0500  
From: "rohre" <rohre@arlut.utexas.edu>  
To: qrp-l@Lehigh.EDU  
Subject: [5945] Thanks to the list again: GDO info  
Message-ID: <n1322337766.70056@msmailgw1.arlut.utexas.edu>

Several replies on my interest in the MFJ GDO coil kit for the MFJ Antenna Analyzers. I have information coming, and I hope Frank is going to post the U. K. version on his web site.

This two coil set allows simulated Grid Dip Oscillator dipping or finding resonance in tuned circuits, components plus their leads, and many other useful tests. Of course, the analyzer alone does most of the antenna measuring duties we used to do with tube or solid state dip oscillators.

It was pointed out that the complete manual for the MFJ GDO coil set is on their web page: <[www.mfjenterprises.com](http://www.mfjenterprises.com)> ( Most MFJ products also have an on line manual, thus if you misplace your manual, you can reprint one from there.) A really public spirited thing for a company to do!!

Incidentally, I try to copy manuals if small, for test gear, so that when loaned out, I only send a copy, not the original manual. That way, I have the manual if ever I trade something off.

Thanks again to all who replied, I think I have also thanked each personally.

72, Stuart K5KVH

-----  
Date: Fri, 13 Mar 1998 11:48:05 -0500 (EST)  
From: kd4zkw <kd4zkw@amsat.org>  
To: QRP-L <qrp-l@Lehigh.EDU>  
Subject: [5946] It's stupid antenna question time...  
Message-ID: <Pine.LNX.3.95.980313113954.3453i-1000000@danial.dialisdn.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

OK, here goes.

First, is an antenna functional on conductivity or permeability ?  
In other words, is what an antenna radiates electromotive or magnetomotive ?

Second, does the area of a certain antenna structure work against you at qrp levels ? In other words, will the antenna saturate

before it reaches full radiation potential ? Will the antenna be less able to receive ?

Thirdly, we know that antennas should be one wavelength above ground. We know this is because antennas radiate at certain wavelengths, and that absorption of waves would be a problem. We know that dipoles do not make use of ground wave propagation, unless they are vertically polarized. Now, two stupid questions at once. Will an inverted Vee make better use of ground wave propagation, and if the antenna is vertically polarized, is there a point where it can be considered to be too high to make good use of ground waves ? I know with height that space waves are much better, due to the line of sight capabilities, but at low frequencies, would having the antenna higher than one wavelength affect it's ability to utilize ground wave propagation ?

OK, all for now.

```
-----  
| Curtis D. Levin kd4zkw | kd4zkw@amsat.org | QRP-L #1488 |  
| http://www.diaidsn.net/user/cdlevin |  
-----
```

-----  
Date: Fri, 13 Mar 1998 10:09:32 -0700 (MST)  
From: Joe Gervais <vole@primenet.com>  
To: w5yr@swbell.net  
Cc: qrp-l@Lehigh.EDU  
Subject: [5947] Re: I'm Getting There!  
Message-ID: <199803131709.KAA06528@usr08.primenet.com>

Howdy!

George (W5YR) wrote:

>  
> As you can see from my very high QRP-L number (1373), I am new to this  
> flashlight-power-level mode of operating even though I am soon entering  
> my 53rd year in ham radio.

Never too late to discover the best-kept secret in  
ham radio! Bottom line is that it's FUN FUN FUN!  
And if anything can guarantee that ham radio will  
survive the ages, that's it.

> I have been reading all these stories of various contacts under very  
> unusual conditions, etc. using very low power. At first I was more than  
> a little suspicious, but now I am beginning to understand that you guys  
> are on to something!

You'll be amazed at what you'll be doing with QRP, and  
you'll be even more amazed by the folks you'll meet who  
will refuse to believe you did it. :-) It's always fun  
to bring your logbook to hamfests/meetings and let the  
naysayers page through.

> Heard a couple of Zero's the other night going at it near 7040. Both  
> were kicking the meter up to at least S9+20 db constantly. Where are  
> all these "weak" signals barely out of the noise?

Usually that's the Fox. ;-) But seriously, yes, there  
are some great QRP sigs out there. Ever hear KH6AFS/QRP?  
He's pegged my "guess-meter" with his pineapple sig on  
more than a few occasions. Plus most nights on 40m,  
fellow CA QRPers come booming into my QTH at no less  
than S-7, often stronger. Makes it easier to find the  
Fox, using the ol' CA Fox Hunter Beacon Network. :)

So you don't need to be at a solar peak for QRP to work!

> Lastly, I was listening to 40 last night when I heard ZK1DI calling CQ  
> DX on 7003.0 and getting no response. I cranked the IC-765 back down to  
> 5 watts and gave him a call along with a couple of other stations. He  
> came back to a W6 and then he called me! Gave me a 599 report, but that

Congrats! Ain't it GREAT?!? Alot of folks here on QRP-L  
have their QRP DXCC, and many of us have at least a few  
dozen DXCC countries under our belts. It works! Better  
still is working DX 2-way QRP. I've been lucky enough to  
find and work a few fellow QRPers from JA, KH3, EA8,  
and of course KL7, VE, XE and KH6.

> Made a believer out of me! This stuff really works. Thanks for adding  
> new life to ham radio for another old timer.

Heck, we're all along for the same ride! Thank YOU for  
joining The Few, The Loud, The QRPers. :)

> Wonder if the 765 will ever get back to its normal 100+ watts of output?

Nah, too easy. Like buying your fish at the store when  
instead you could catch it from your cabin by the lake. :)

Look forward to hearing you on the air. Great bunch of folks here, don't think you'll be disappointed at all!

Actually your post would make great material for Richard NU6SN's QRP column in Worldradio. It'd be great to read in a QRP-only rag too, but that'd just be preaching to the choir. Maybe your tale could convince other hams to give QRP a shot.

Anyway, welcome again. Building/operating are very much alive and well here. You'll be happier than Dilbert in an Electrode Hut clearance sale. :-)

And while I've got your ear, did I mention NorCal's "QRP To The Field" (QRPTTF) contest on April 25th? ;-)

Cheers de AB7TT,

-Joe, vole@primenet.com, NorCal Contest Manager, AZ ScQRPions (Phoenix)

"Every man dies. Not every man really lives" -- Braveheart

-----  
Date: Fri, 13 Mar 1998 11:14:05 -0600 (CST)  
From: jdenison@morelr.com (JOEL DENISON)  
To: qrp-1@Lehigh.EDU  
Subject: [5948] From an Antenna geaux-reaux  
Message-ID: <199803131714.LAA05258@m20.morelr.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

High Gang:

It's the antenna geaux-reaux here... U know that great working loop I was bragging about... well... seems we had a storm here... Ice, wind and stuffs like that... well the loop pooped and fluttered and shuddered and fell...

My twin lead is all cut up... the gnd (not being flat, like good ground should be :-)) is too slippery to crawl on... and I have no antenna... :-)

But have fear... I will try some strapons that should let me walk on the ice and I'm going to try the "coax twinlead" thing to a 135ft. dipole... up 50ft

If adverse conditions make for the best antenna raising conditions this should be an excellent antenna... if not, murphy will rejoice today!!!

If I don't overload my "ticker" or break something useful on my body, like an arm or a leg, then later today I can "snicker" at mr. murphy and play radieaux sum meaux... Hang in there Bob, I'll make six land yet...

Sometimes I wonder what a Cajun lad is doing up hear in sneaux country..



bye now  
joel in Maine in the sneaux :-)

God Bless  
Joel

WA5CVM	Gentlemen don't Cry, They QSY :-)
Joel Denison	Gentle Lady (RC Sail Plane)(049 engine - start)
PO BOX 542	40 mtr loop up 50ft
Strong, Maine 04983	QRP ARCI 4066 NEW ENGLAND QRP 476 QRP-L 765
jdenison@morelr.com	AK/QRP 109

-----  
Date: Fri, 13 Mar 1998 10:26:13 -0700 (MST)  
From: Joe Gervais <vole@primenet.com>  
To: qrp-l@Lehigh.EDU  
Subject: [5949] Novice/Tech+ Sprint/Hunt  
Message-ID: <199803131726.KAA071111@usr08.primenet.com>

Howdy again,

Cam (N6GA), ARCI Contest Dude, wrote:

>  
> This Sunday, March 15, is the first annual Novice/Tech+ Sprint. You-all are  
> invited to crank your knobs up to the Novice CW portion of your favorite  
> band, crank your keyer speed down, and join in the fun. This is going to be  
> like a 4 Hour Fox Hunt, with the N/T+ stations as the Foxes, and all others  
> as the Hunters. Everyone can work everyone else, but the big points will  
> come from snagging the N/T+ stations.

Sounds great! Is it too late to gather a list of N/T+ ops who will be on? Maybe if we had their callsigns sent to the List it'd be easier to hunt them down?

For all you N/T+ ops, this is a GREAT chance to get some experience and work ALOT of new states. You'll have sharp QRP ops (best ears in ham radio!) hunting you down, eager to go as slow as you need to.

I'll be up in the snow with the family this weekend, so looks like I'll be doing an early QRPTTF field operation. :)

All you N/T+ ops, please speak up. Do you know how to call "CQ" for the contest? Folks will be hunting for YOU, so it's a good time to grab a freq and call. Try "CQ TEST CQ TEST CQ QRP TEST DE...". Keep your filter wide so you can hear folks answering (unless QRM is clobbering you).

And definitely try 15m! If condx are favorable, it'll be a great band for the 'test! Good luck and sure hope to hear you N/T+ ops out there!

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"Every man dies. Not every man really lives" -- Braveheart

-----  
Date: Fri, 13 Mar 1998 13:02:24 -0500 (EST)  
From: kd4zkw <kd4zkw@amsat.org>  
To: Cam Hartford <camqrp@cyberg8t.com>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5950] Re: Novice/Tech+ Sprint IAQ  
Message-ID: <Pine.LNX.3.95.980313130038.34531-1000000@danialdiaisdn.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 12 Mar 1998, Cam Hartford wrote:

> QRP ARCI NOVICE/TECH+ SPRINT  
>  
> Date/Time:  
> March 15, 1997; 2000 - 2400 Z

Never died a contest before. Do we enter before or after the contest ?  
Duh.

Ps -- will be working 28.110 qrp de kd4zkw/t .. 72

Is that legal ?

-----  
| Curtis D. Levin kd4zkw | kd4zkw@amsat.org | QRP-L #1488 |  
http://www.diaaisdn.net/user/cdlevin

-----  
Date: Fri, 13 Mar 1998 11:16:34 -0700 (MST)  
From: Joe Gervais <vole@primenet.com>  
To: kd4zkw@amsat.org  
Cc: qrp-1@Lehigh.EDU  
Subject: [5951] Re: It's stupid antenna question time...  
Message-ID: <199803131816.LAA21971@usr09.primenet.com>

Howdy,

Curtis (KD4ZKW) wrote:

> First, is an antenna functional on conductivity or permeability ?  
> In other words, is what an antenna radiates electromotive or  
> magnetomotive ?

Well, a propagating radio wave has both electric and magnetic field components to it (at right angles to each other), right? So I'd assume the answer is "both". :-) Or am I way off-base here?

> Second, does the area of a certain antenna structure work against  
> you at qrp levels ? In other words, will the antenna saturate  
> before it reaches full radiation potential ? Will the antenna be  
> less able to receive ?

Receive is receive is receive at any power level, so no worries there. As for transmitting, power level is *very rarely* an issue. I've heard (but never confirmed) about the odd trap-based multiband antenna that would work at QRO but not QRP because there wasn't enough juice to get past a contaminated area. But stressing over that is like buying meteor insurance. :)

Don't worry about it, just radiate. :-)

> Thirdly, we know that antennas should be one wavelength above ground.  
> We know this is because antennas radiate at certain wavelengths, and  
> that absorption of waves would be a problem.

Actually that's an overstatement. What do you want the antenna to do? For NVIS work, a nice low antenna is the ticket. Or if I have a buddy several hundred miles away, a dipole up 1/8th-wave might be much better than a dipole

a full wave up (skip zone and all that).

Only my opinion, but don't get too tied up in theory at the expense of learning the difference between an \*ideal\* antenna vs. an \*effective\* antenna. A ground-mounted 1/4-wave vert with lots of radials is one heck of a good radiator!

> Now, two stupid questions at once.

Not stupid questions at all! But since I've blabbed enough, and there are folks here who know far more than I, I'll let them handle the rest. :)

Good luck and happy hamming!

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"Every man dies. Not every man really lives" -- Braveheart

-----  
Date: Fri, 13 Mar 1998 13:21:21 EST  
From: ROYGREGSON <ROYGREGSON@aol.com>  
To: JGold@tnitech.edu  
Cc: qrp-1@Lehigh.EDU  
Subject: [5952] It takes a Super Antenna etc.  
Message-ID: <dcc8457c.35097923@aol.com>  
Mime-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7bit

Jeff, an old timer tells me to be sure to lift your feet off the deck when keying and try to time your sending to between the electric fence pulses. But the electric fence does a real good job of boosting the signal.

72 Roy

-----  
Date: Fri, 13 Mar 1998 14:30:32 -0500 (EST)  
From: Chris Cartwright <ccart@dns.vidtel.com>  
To: QRP Reflector <qrp-1@Lehigh.EDU>

Subject: [5953] DK3 UPDATE: Hams and trust (long)  
Message-ID: <Pine.LNX.3.93.980313135544.600E-100000@dns.vidtel.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Sorry for the BW gang but there are so many in the group buy now that individual replies are almost impossible. Once the group buy "group" is a fixed number I'll make up a mail list so I don't have to bother all of QRP-L.

First, this thing has gone past my wildest expectations. Thank you all for your patience and understanding since I'm still new at group buys. But I now appreciate even more the work NF3I has done for all of us. We are over 40 DK3's, and while the deluge has slowed down, orders are still coming in. I talked to W6AAQ yesterday and let him know (warn him:) just how big this thing was getting. It didn't seem to phase him. He may go in early for surgery, but he thinks we should be able to wrap the whole group buy before the end of April. (subject to change)

But on the the matter of Hams and trust... In talking to Don he realized that I had never seen/touched/used a DK3. He said, "I'll send one out to you today so you'll know what you're talking about". He didn't ask for payment, has never met me, or seen more than a few emails and phone calls from some guy on the opposite side of the country promising him a big order -- and he's sending one out so I'll know what I'm talking about. He trusts me.

To speed things up, and let Don know that I'm sincere about this thing, I sent off a letter, and a check, to order 35 of the DK3's. I trust him. I let him know that there would be a second order to make up the difference. Fortunately I am in a position to do this, and it's not completely altruistic, if "you" don't send payment I still have "your" antenna. But I trust this group enough front some money to get this thing going. Norcal did it for me when I first got into QRP, and now I'm just passing along the favor.

This isn't to pressure anyone into anything. I'm not sure when the 35 will get here, or how many will come in at what time. I'm planning on shipping them out in the order the "orders" came in, as best as I can make that happen. Suffice it to say, I trust you guys, and I hope you can trust me. What goes around comes around and all that.

Now that we're all weepy eyed, does anyone have a lead on where I can get about 50 long skinny boxes? I'm shopping 'the net' without much luck.

72 es tnx

-- Chris Cartwright, Technical Engineer | ccart@vidtel.com --

-- N3XRV       ARRL-VE    QRP WAS 28/13(w/c)   | http://dns.vidtel.com/~ccart --  
-- QRP-L #655 NORCAL #1891 QRP-ARCI #???? NJ-QRP #105 LIQRP #???? MDmW #5 --

-----  
Date: Fri, 13 Mar 1998 13:17:20 -0800  
From: LYN WILLIAMS <designserv@ipass.net>  
To: ROYGREGSON@aol.com  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5954] Re: It takes a Super Antenna etc.  
Message-ID: <3509A260.C2120AEA@ipass.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

THAT'S GOOD! No QSK on electric fence!

ROYGREGSON wrote:

> Jeff, an old timer tells me to be sure to lift your feet off the deck when  
> keying and try to time your sending to between the electric fence pulses. But  
> the electric fence does a real good job of boosting the signal.  
>  
> 72 Roy

-----  
Date: Fri, 13 Mar 1998 11:30:59 -0700  
From: Niel Skousen <nskousen@scientechnology.com>  
To: qrp-l@Lehigh.EDU  
Subject: [5955] WTD: FR-7 or similar 3 way trade...  
Message-ID: <199803131831.LAA09790@eaglerock.if.scientechnology.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Ok,  
Ed L. 'needs' a gen.cov rx, he has the 10:1 scope probes  
I have some packet stuff (PK232, PacComm), and somebody has an older FR-7 or  
similar solid state gen.coverage receiver...

Wanna do a three way trade ??

Niel

-----  
Niel Skousen: Sr.Eng, SCIENTECH.SPG/CFG/NUSI  
208.525.3742, 524.9229 FAX 529.4721 Idaho Falls ID  
nskousen@scientech.com WA7SSA QRP-L.119  
Z-----DN33wm--- . . . -

-----  
Date: Fri, 13 Mar 1998 12:30:43 -0600  
From: Tim Ahrens <tahrens@inetport.com>  
To: qrp-l@Lehigh.EDU  
Subject: [5956] ICOM Level Converter Schematic  
Message-ID: <35097B53.5164696@inetport.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Does anyone have a copy of the QST that has  
a Low Cost PC Interface for Icom Radios? This would be  
from QST, July 1992 page 37-38. Actually, I just need the  
schematic.

Thanks all!

Tim W5FN

-----  
Date: Fri, 13 Mar 1998 12:34:01 -0600  
From: Tim Ahrens <tahrens@inetport.com>  
To: qrp-l@Lehigh.EDU  
Subject: [5957] FS: TS940SAT  
Message-ID: <35097C19.60320599@inetport.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

With my recent acquisition of the 706, I have decided to  
peddle my TS940. If anyone is interested, please drop me  
a line directly.

It does not have any of the additional filters, but does include  
the external speaker, and MC60? (fancy microphone). On a scale of

1 to 10 (10 is best), I would say it is an 8. No scratches, etc. I purchased it about a year ago from someone else. (not original owner).

\$975 you ship.

It's a proven FOX hunter!!

Thanks,

Tim W5FN

-----  
Date: Fri, 13 Mar 1998 12:34:33 +0000  
From: Roger Hightower <n7kt@earthlink.net>  
To: tahrens@inetport.com  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5958] Re: ICOM Level Converter Schematic  
Message-ID: <350927D9.4EBC5E77@earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I could use that too, if anyone has it.

Tnx/72..Roger

--

72/73, de Roger, N7KT

-----  
Date: Fri, 13 Mar 1998 14:08:57 -0500  
From: Mel Evans <MelEvansGM6JAG@compuserve.com>  
To: qrp-l <qrp-l@Lehigh.EDU>  
Subject: [5959] VFO can of worms  
Message-ID: <199803131409\_MC2-36A8-16F8@compuserve.com>  
MIME-Version: 1.0  
Content-Transfer-Encoding: quoted-printable  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Disposition: inline

Hi there guys 'n gals,

What is the opinion of the list as to which configuration of VFO is the most likely to be stable for HF rx purposes? =



Let's assume it is to be built like the proverbial brick out-house, and is inherently capable of withstanding a 2metre (six foot) drop test.

Let's also assume the psu will supply a practically stable source, with virtually no ripple or hum--- or even will be completely DC supplied from a nice big battery!

Finally, let's assume expense is no great object, and within sensible limits the VFO is to perform at or around 6 Mhz and cover 0.5 Mhz.

72 and 73 de Mel  
GM6JAG  
Edinburgh, Scotland UK.  
Home of the last HW9

G-QRP 1283 EA-QRP 88 ARRL and the likes

Area Chairman, British Caravanner's Club, Scotland.

-----  
Date: Fri, 13 Mar 1998 11:53:59 -0800 (PST)  
From: Stanley Wilson <microres@crl.com>  
To: Mel Evans <MelEvansGM6JAG@compuserve.com>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5960] Re: VFO - Make it super stable  
Message-ID: <Pine.SUN.3.91.980313114941.29542A-1000000@crl8.crl.com>  
Mime-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

First build it like a brick house.

Now which circuit ? Vackar

number one in stability is the Vackar the second choice would be a Clapp which was based upon the Vackar design.

In addition the output of the vackar is reasonable constant over a wide range of frequencies. I have built Vackar circuits that moved less than 14 hz in 24 hours at 14.0 mHz. They will work well up 50 mHz.

de stan ak0b

-----  
Date: Fri, 13 Mar 1998 13:02:32 -0700  
From: "Caro, Carlos" <carlos.caro@lmco.com>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>,  
"MelEvansGM6JAG@compuserve.com" <MelEvansGM6JAG@compuserve.com>  
Subject: [5961] RE: VF0 can of worms  
Message-ID: <E655EAE038BAD111926200805F312822063DAC@cos141-gate55.ccs.lmco.com>  
MIME-version: 1.0  
Content-type: text/plain

Mel,

IF you use same quality parts in each VF0, IF you keep the loading very light with buffers, IF the electrical circuit is properly set up as far as gain, minimum power dissipation etc. then I don't think you will find tuppence difference between them. Which ever is easiest for you to implement would be the way to go.

Regards, Carlos #1333

-----  
Date: Fri, 13 Mar 1998 14:05:37 -0600  
From: "Bill Denton" <bdenton@tenet.edu>  
To: tahrens@inetport.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5962] Re: ICOM Level Converter Schematic  
Message-ID: <35099191.1B80@tenet.edu>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Tim Ahrens wrote:

>  
> Does anyone have a copy of the QST that has  
> a Low Cost PC Interface for Icom Radios? This would be  
> from QST, July 1992 page 37-38. Actually, I just need the  
> schematic.  
>  
> Thanks all!  
>  
> Tim W5FN

I use the one from J-com for my Kenwood and Yaesu. For Icom it's a TC-1 for \$54.95. [www.ramseyelectronics.com](http://www.ramseyelectronics.com)

MFJ makes one to.

Bill W5SB

-----  
Date: Fri, 13 Mar 1998 14:02:16 -0600  
From: Mike Martin <mmartin@netins.net>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5963] Newbie  
Message-ID: <350990C3.6B3F8700@netins.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hi All.

I am new to the list and new to QRP (in fact, so new that I don't have rig) and am looking for ideas, suggestions, ect. in getting started. Any help will be appreciated.

Thanks & 73

Mike  
KA0AMA

-----  
Date: Fri, 13 Mar 1998 14:03:31 +0000  
From: "Paulette Quick, WB9VHF" <plquick@facstaff.wisc.edu>  
To: qrp-1@Lehigh.EDU  
Subject: [5964] Re: VFO can of worms  
Message-ID: <v03007802b12eeca2c128@[144.92.104.132]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Mel!

Can of Worms! What kind of Altoids tin have you been buying! Maybe this will start a run on containers at Joe's Bait Shop. After all, fishline IS good for stringing up antennas and hidden support lines. ;^)

Paulette Quick, WB9VHF  
Madison WI  
plquick@facstaff.wisc.edu

-----  
Date: Fri, 13 Mar 1998 13:10:08 -0700 (MST)  
From: "Mark E. Monninger" <markem@primenet.com>  
To: Tim Ahrens <tahrens@inetport.com>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5965] Re: ICOM Level Converter Schematic  
Message-ID: <Pine.BSI.3.96.980313130809.11260A-100000@usr06.primenet.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

There's one in the Handbook also...might be the same one. If you don't find it elsewhere, let me know & I'll scan it & email it.

Mark AA7TA

On Fri, 13 Mar 1998, Tim Ahrens wrote:

> Does anyone have a copy of the QST that has  
> a Low Cost PC Interface for Icom Radios? This would be  
> from QST, July 1992 page 37-38. Actually, I just need the  
> schematic.  
>  
> Thanks all!  
>  
>  
> Tim W5FN  
>  
>

-----  
Date: Fri, 13 Mar 1998 15:13:15 -0500 (EST)  
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>  
To: kd4zkw <kd4zkw@amsat.org>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [5966] Re: It's stupid antenna question time...  
Message-ID: <Pine.GS0.3.96.980313144143.5387E-100000@moe>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

> First, is an antenna functional on conductivity or permeability ?

> In other words, is what an antenna radiates electromotive or  
> magnetomotive ?

Actually, a current standing on any conductor produces both electric and magnetic fields. Electric fields are largely responsible for far field effects, while near field effects are largely a product of magnetic fields. Notice that neither the conductivity or permeability of the antenna material are relevant. Hence, your question about x-motive forces is not well formulated, since forces are not involved. The antenna is a transducer, the conditions of which transform electrical energy into electro-magnetic radiation, the fields of which can expand without limit.

Do not think of antenna wire as a normal conductor, which must form a complete circuit to conduct current. Think of the antenna element as a waveguide for standing current levels and hence for energy transformation. Then, most of the questions that emerge from the wrong analogy--with regular conductors in a circuit--go away.

> Second, does the area of a certain antenna structure work against  
> you at qrp levels ? In other words, will the antenna saturate  
> before it reaches full radiation potential ? Will the antenna be  
> less able to receive ?

Since we are not concerned with the magnetic properties of the antenna materials or structure, saturation is not a valid question. We use low loss material to reduce energy losses in terms of the wrong transformation of energy--into heat. The energy distributes itself along the antenna structure identically for any level of signal. The current levels are in proportion to the power level, but there is never a minimum threshold level or anything else of that sort. In fact, it is higher power on transmissions that lose more, as the wire approaches its current carrying capacity. On reception, for otherwise identical antennas, wire size makes no difference, since power levels are low.

> Thirdly, we know that antennas should be one wavelength above ground.  
> We know this is because antennas radiate at certain wavelengths, and  
> that absorption of waves would be a problem. We know that dipoles do  
> not make use of ground wave propagation, unless they are vertically  
> polarized. Now, two stupid questions at once. Will an inverted Vee  
> make better use of ground wave propagation, and if the antenna is  
> vertically polarized, is there a point where it can be considered to be  
> too high to make good use of ground waves ? I know with height that  
> space waves are much better, due to the line of sight capabilities, but  
> at low frequencies, would having the antenna higher than one wavelength  
> affect it's ability to utilize ground wave propagation ?

Ground wave propagation comes in two forms. Surface propagation is largely a function of vertically polarized wavefronts that diminish in

proportion to the square of the distance from the antenna. They are strongest at the lowest frequencies and almost (but not quite) non-existent by 10 meters. Point-to-point propagation is direct line of sight transmission and reception and is independent of signal polarization. At 10 meters and above, it is the chief mode of ground wave propagation. For line of sight work, your antenna and the other station's antenna should be using the same polarization, since cross-polarization reduces signal levels considerably.

How high one puts an antenna is a function of the antenna type and its use. Low horizontal dipoles (less than  $3/8$  to  $5/8$   $\lambda$  up) tend to focus most of their energy at very high elevation angles. They are sometimes useful (along with low horizontal  $1 \lambda$  loops and the like) for "near vertical incidence" propagation for short range communication within what some call the skip dead zone. The elevation angle of maximum radiation for a dipole (and roughly speaking for most horizontally polarized antennas) decreases as the antenna height increase. The angle is about 26 degrees for a dipole at  $1/2 \lambda$  up and about 14 degrees for a dipole  $1 \lambda$  up. The signal or field strength of such antennas changes very little with the quality of ground beneath the antenna itself.

Vertically polarized antennas can be roughly divided between those needing a ground plane to complete the antenna structure ( $1/4 \lambda$ ) and those that do not (vertical dipoles, etc.) Performance will vary with both the local ground quality and the quality several  $\lambda$  away, as well as with antenna height. In general, a vertically polarized antenna will have a lower angle of maximum radiation for any given mounting height (up to well above  $1 \lambda$ ), but its more nearly omnidirection pattern and its dependence on ground conditions yield a lower level of radiation field--unless you happen to be surrounded by salt water to the horizon. This does not make a vertical less useful, since at low HF, it can easily surpass the performance of a low dipole for DX (low angle) work, and the absence of high angle fields tends to make it less susceptible to QRM/QRN in the 100-500 mile range, which can mask signals in a low dipole. However, many types of vertical antennas are more susceptible to local immediate area noise, such as the neighbors power tools.

This is not the whole story, but hopefully enough to help you reformulate the questions you have so that the handbooks, etc., begin to make more sense. Hope something here is useful.

-73-

LB, W4RNL

L. B. Cebik, W4RNL	/\	/\	*	/	/	/	(Off) (423) 974-7215
1434 High Mesa Drive	/	\	\	----	/\	---	(Hm) (423) 938-6335
Knoxville, Tennessee	/\	\	\	/	/	/	(FAX) (423) 974-3509

37938-4443      USA      /   \   \   \   \      ||      cebik@utk.edu  
QRPARCI 2572    G-QRP 7203    CQC 125    NEQRP 347    NORCAL 1111    MIQRP 1432  
NWQRP 401      ARRL Life: Technical & Educational Advisor    10-10 41159  
QCWA 13211    scQRP 28    AK/QRP 343    CW Ops QRP Club (VK) 476    FISTS 2600  
                 http://funnelweb.utcc.utk.edu/~cebik/radio.html

-----  
Date: Fri, 13 Mar 1998 13:24:54 -0700  
From: wa5whn@juno.com  
To: qrp-l@Lehigh.EDU  
Subject: [5967] UTM, Universal Transverse Mercator, or getting lost with a  
detailed map for QRPTTF '98  
Message-ID: <19980313.132459.2662.0.wa5whn@juno.com>

qrp-lers,

With all of the activity about obtaining detailed topo maps, for the  
upcoming NorCal QRPTTF '98, just over 5 weeks away, there is a very good  
explanation of UTM {Universal Transverse Mercator} in the March, 1998  
{page 58} issue of "CQ VHF". The article was written by Bob Josuweit,  
WA3PZO, bjosuweit@aol.com.

Point Your' Web Browser at the following URL;

<http://www.basarc.org/>    {a NorCal Search and Rescue Group}, lots of UTM  
templates.

With a magnetic compass {except at the Earth's North & South poles} & a  
UTM labeled map, I won't need a GPS receiver. However, a suggestion: if  
You should decide to purchase a 12 channel GPS receiver, make sure it can  
display Your' coordinates in maidenhead grid squares & UTM, along with  
Latitude & Longitude. The VHF/UHF contesters use maidenhead grid squares  
for the simplicity of pointing antennas in the right direction, and grid  
square awards, and they don't need down to 330 feet resolution, unless  
You are on 10 GHz, feeding a 3 meter dish, 50 miles away, however, for a  
4 element beam, over 50 miles away, on 6 meters, the maidenhead grid  
squares will suffice. Besides, today, an 8 channel GPS receiver sells  
{US\$} from \$50.00 to \$100.00 each, a good UTM topo map is less than \$6.00  
from the USGS, or You can generate Your' own, cheaper {per map}, using  
the CDs from USGS.

If I am trying to explain to someone exactly where I am at, out in the  
country, and they do not have a GPS receiver, a UTM map will be very  
useful. A good UTM topo map can resolve Your' location down to within 330

feet, without a GPS receiver. For those of You who were or are now in the US Military, it's those same UTM maps that we know & love from the DOD Mapping Agency. I have seen some excellent UTM topo maps of Canada too.

Listen for us from the 4 Corners during the NorCal QRPTTF '98  
{<http://www.swcp.com/~n5zgt/n4c/>}.

maidenhead grid square DM56lx

12S 0673940

UTM 4096550 -----> UTM coordinates, number above is the zone

36 degrees 59.941 minutes north

109 degrees 02.713 minutes west

What a hobby, a good UTM topo map, 3 daysof rations in a backpack, itty-bitty radios, in the wilderness. It just does not get any better than this People. :-) When I hike up into the Wheeler Peak {elevation: 13,161 feet asl} Wilderness {ENE of Taos, NM, in the Sangre de Cristo Mountains - Carson National Forest} this summer, I will be carrying only UTM topo maps through the Enchanted Forest {Yes, that's what it is really known as.} When I return to Alaska {Jim - AL7FS, You have been warned. ;-) }, I will be carrying UTM topo maps for Denali Park.

Soldering these SMIC parts on to a circuit board, with bifocals on, is sure entertaining, almost as much fun as counting turns on a toroid. ;-) Gee, I can remember writing macro code to do this for insertion machines not that long ago. :-)

72...Jay, WA5WHN DM65qd

Albuquerque, NM USA

-----  
You don't need to buy Internet access to use free Internet e-mail.  
Get completely free e-mail from Juno at <http://www.juno.com>  
Or call Juno at (800) 654-JUNO [654-5866]  
  
-----



Date: Fri, 13 Mar 1998 14:48:23 -0600  
From: "ukii" <ukii@megsinet.net>  
To: "qrp-1" <qrp-1@Lehigh.EDU>  
Subject: [5968] Rotor Help? Ham-M  
Message-ID: <000301bd4ec1\$81dad9a0\$324e85d0@ns1.megsinet.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Greeting and Salutations...  
Dont know where else to ask this and count on replies...  
I have a Cornell Doublier (sp?) Ham-M rotor and lost the  
book. I want to know if I can use a Tail Twister TX2 control  
box with it. I have the book on the TX2 but dont remember  
the wiring for the Mah-M.  
Please,any help would be greatly appreciated.  
Thanks Again  
John  
n9ukx

-----  
Date: Fri, 13 Mar 1998 13:52:53 +0000  
From: Roger Hightower <n7kt@earthlink.net>  
To: markem@primenet.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [5969] Re: ICOM Level Converter Schematic  
Message-ID: <35093A34.EC6C7645@earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Thanks, Mark. I found it on page 22.12 of the 1996 Handbook.

--  
72/73, de Roger, N7KT

-----  
Date: Fri, 13 Mar 1998 15:57:32 -0500  
From: Zack Lau <zlau@arrl.org>  
To: qrp-1@Lehigh.EDU  
Subject: [5970] Re: Elmer 101: Measuring Diodes

Message-ID: <35099DBC.3D7C@arrl.org>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I've gotten 1N23 mixers to put out 1 mW at 10 GHz, they can be pretty rugged. W1RFI made a 43,000 mile/watt SSB contact with such a rig (the unusual part was the SSB!) The antenna was just a tiny brass horn.

OTOH, some of the new microwave FETs have a max rating of just 2.5 volts. A Fluke 75/77 puts out 2.6 volts.--Zack W1VT

-----  
Date: Fri, 13 Mar 1998 13:27:22 -0800 (PST)  
From: David J Adams <adamsclan@netgate.net>  
To: ccart@dns.vidtel.com, qrp-l@Lehigh.EDU  
Subject: [5971] Re: DK3 UPDATE: Hams and trust (long)  
Message-ID: <199803132127.NAA23118@u1.netgate.net>

-----  
Date: Fri, 13 Mar 1998 15:21:14 -0600  
From: Tellefsen Bob-CNSE97 <cnse97@lmpsil02.comm.mot.com>  
To: JGold@tntech.edu  
Cc: QRP-L list <QRP-L@Lehigh.EDU>  
Subject: [5972] DK3  
Message-ID: <351A2DFAE256D111883A0060B06B16624756FE@s-il02-j.comm.mot.com>  
MIME-Version: 1.0  
Content-Type: text/plain

Hi, Jeff.

The DK3, and all the other screwdriver antennas, are the descendents of the old Webster Bandspanner mobile antennas from the late 50s, early 60s. I still have one, and won't part with it :-)

In every case, the center loading inductor is inside a tubing structure, and the upper whip section slides up and down. The bottom of the top whip makes contact with the internal coil, wiping along from turn to turn. In the screwdriver antenna, the slider moves up and down by a motor. In my old Bandspanner, you did it by hand.

The antenna itself doesn't know anything about frequency, swr or what have you. That information comes from your rig (frequency) or your swr bridge (swr).

The benefit of the screwdriver antenna in general is that it is remotely tunable. You flip a switch one way, and the whip slides up in the antenna housing. As it does so, its wiper moves toward the top of the coil, leaving more of the coil in the circuit (and shorting out the part of the coil above the wiper). As more coil is brought into play, the resonant frequency of the antenna goes down. You watch your swr bridge indicator (anything from a meter to a simple LED) and you stop the movement when swr is at minimum.

It is also possible to build a phase detector circuit that will do this for you automatically. Some expensive antenna tuners have such circuitry in them. I don't know if any screwdriver antenna package currently offered has such a circuit in it.

That swr minimum I described is determined by how you have matched the antenna to your line.

As you may already know, low frequency antennas with lots of loading (that is, that are rather short compared to a real quarter wave antenna for that frequency) have a rather low feedpoint impedance. A mobile whip on 80m might have a feedpoint impedance of only 3-6 ohms. You need to match that low impedance to your 50-ohm coax.

One impedance matching approach some have used is to make a broadband autotransformer on a toroid core with multiple taps. In other words, 50 ohms in across the whole toroid, with taps maybe at the center for 12.5 ohms, and each turn thereafter toward ground for successively lower impedances.

I once saw a way of estimating the feedpoint impedance that has held up fairly well. Given that the ideal feedpoint impedance of a quarter wave antenna is about 35 ohms, the feedpoint impedance increases proportionately to the amount of shortening. So an antenna 1/8 wave long (half of the quarter wave) would be about half of 35 ohms, say about 17 ohms. A 1/16 wave vertical (with lots of loading) would be half again, roughly 8 ohms. And so on. Not exact and doesn't include ground losses, but it gives you a feeling for what you are facing when planning a loaded antenna.

By this method, an 80m whip 8 ft long would have an impedance of roughly 4 ohms. ( $8/66 \approx .12$ , so  $.12 \times 35 =$  about 4 ohms).

The ground loss in the vehicle comes into play here, so you won't really see the true lowest feedpoint impedance. The vehicle ground loss is in

series with it. Thus, a 3 ohm feedpoint impedance with a 10 ohm ground loss resistance looks like a 13 ohm impedance. The efficiency of such an installation would be 3/13 or about 23%. That's why it is very important to get the ground losses in mobile antennas down as low as possible.

Anyway, this is probably more than you wanted to know. Hope it gives you a feeling for what's going on in a screwdriver style antenna.

73, Bob N6WG and 01' Kenwood

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Date: Fri, 13 Mar 1998 21:34:29 GMT  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
To: qrp-1@Lehigh.EDU  
Subject: [5973] Elmer101 Schematics  
Message-ID: <199803132134.VAA19428@chuck.dallas.sgi.com>

To the Elmer101 Gang,

I have placed on my web page the schematic to the SW-40+ with Dave Benson's, NN1G's, permission. Work in progress. See my web address at the end of my signature. (Interesting sentence/syntax English issue of how to do the double ownership :-))  
So all you spell checkers out there back off. :-)) You get the point of the sentence.

1. There is a .jpg image. It is big. 1055x629 pixels. You will see why when you go get it. I think anything smaller will kill your eyes and be unreadable. Consider the landscape mode of viewing depending upon your browser.
2. There is also the PostScript file for producing this image IF you have postscript capability and a postscript printer. In the PC world of Windows 3.1, Windows 95, and Windows NT I haven't clue as to how useful this is going to be. So if you are successful, in a short note give the menu as to how you did it to the group at large. I'm sure there will be a few questions. Limit one per O/S and customer please. There seems to be some problem with some systems getting the file and then not sending

it unmodified to the PostScript printer so that it prints correctly. The file is in ASCII but don't bother reading it. It gets converted to lines on the printer when working correctly.

This system is in place to see how it will work. There seems to be no single way to keep everyone in the same format. Also the images will be changed aperiodically until the final version that Dave releases. I personally like the PostScript format as you can email it, save it, and print at 1200dpi or better resolution on a number of new printers.

Please restrict use to your own personal use and not distribute freely. It is the intellectual property of one Dave Benson, NN1G, that he is allowing us, the QRP community, to use and benefit from. Respect his rights as you would want someone to do likewise for your work. Small Wonder Labs will be selling the board kit later.

You lucky people at the ARRL HQ NE QRPers todo on Sunday will get to see Dave, NN1G, and his first version and prototype from what I see of the postings.

I know the question is going to come up so here is the answer. I used my own software that I wrote from scratch in C. No, there is no schematic capture GUI right now. I'm working on a SPICE file input format for later on, but not in a hurry. :-)

Down at the end of the first page there are two pointers to Elmer101 information. Go to the second one and at the end of that linked page you will find the links to the image and the PostScript file.

FYI

Chuck Adams K5FO Dallas,TX CP-60  
<http://reality.sgi.com/adams> [adams@sgi.com](mailto:adams@sgi.com)

-----  
Date: Fri, 13 Mar 1998 16:47:02 EST  
From: [nq2rp@juno.com](mailto:nq2rp@juno.com) (B/BAMS Club Station)  
To: [qrp-1@Lehigh.EDU](mailto:qrp-1@Lehigh.EDU)  
Subject: [5974] Forwarding to Packet!  
Message-ID: <19980331.164606.4783.1.nq2rp@juno.com>

BEWARE!

I just was cautioned that a post I forwarded to the BARK PBBS was in violation of Part 97, and is, in fact, WAS! I took a post from the list concerning an up-coming operating event and posted it to the NQ2RP PBBS, and FORGOT to remove the Juno ad on the bottom...

Juno MAY be free, but Juno makes money from their advertisers, so the Juno stripe is not allowed over on packet. I verified this thru the FCC today on the phone. I have removed the offending ad, but if you are grabbing anything off the list to re-post, check it out for commercial content FIRST, and check with the originator before reposting anything, too...

Better safe than sorry.

72/73, Keith, WB2VUO at the keys at B/BAMS  
NQ2RP - QRP-L # 1294, Byron/Bergen AMateurS Club Station  
Listen for our 10 Mtr Milliwatting Beacon: 125 mW @ 28.287 MHz  
"Our night light runs more power than our Rig!!!"

---

You don't need to buy Internet access to use free Internet e-mail.  
Get completely free e-mail from Juno at <http://www.juno.com>  
Or call Juno at (800) 654-JUNO [654-5866]

---

Date: Fri, 13 Mar 1998 17:05:03 -0500  
From: "Jim Kortge, K8IQY" <jokortge@mci2000.com>  
To: astone@erols.com  
Cc: qrp-l@Lehigh.EDU  
Subject: [5975] Re: 2N2222 RX  
Message-ID: <3.0.1.16.19980313170503.2eef610e@mail49.mci2000.com>  
MIME-version: 1.0  
Content-type: text/plain; charset=us-ascii

At 09:10 PM 3/12/98 -0800, Ron (KA3J) wrote:  
>Jim -- I'd love to see your schematic too. Think you'll publish it  
>somewhere (QRPP) or can get it out to folks thru some other means? Keep  
>up the good work!  
>  
>72,  
>  
>Ron (KA3J)  
>

Hi Ron....Oh yes, when the project is done, I'll write it up for QRPp and anybody else that will publish it. In the meantime, I'd like others to be able to "follow along" as this is developing, as best I can and still get the project done before Dayton. :-)

72 and stay tuned.....Jim

```
Jim Kortge, K8IQY (ex NU8N) | NorCal, QRP-L
jokortge@mci2000.com | __o H.F. bicycle mobile
Fenton, MI | _`\<, Mizuho 17/40 SSB
... .. (*)/(*) . . . . .
NorCal 38S/30 Log - 34 States; 40 Countries - Running 3 watts
Most recent - Iowa Mauritius
```

```
NorCal 38S/17 Log - 22 States; 51 Countries - Running 1.5 watts
Most recent - Alaska Ecuador
```

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Date: Fri, 13 Mar 1998 17:04:10 -0500  
From: "Buck, Preston D" <BuckPD@corning.com>  
To: "'qrp-l@Lehigh.EDU'" <qrp-l@Lehigh.EDU>  
Subject: [5976] FOX: NOGLM log for Thurs 12 Mar 98 EST  
Message-ID: <6B137F61081DD0118DF600805FEAC5C5FF1FD4@SILVER.CORNING.COM>  
Content-Return: allowed  
Mime-Version: 1.0  
Content-Type: text/plain

Greetings all,

Propagation was good last night. Lots of noise but lots of signals. I still haven't figured out how this one ham's CW signal started at 7.139 MHz and was still S9 at 7.1366 MHz. He must have been very close and overpowering my receiver. The log is below.

```
his mine
K0EVZ      599 589 Doc, MN (Is he consistent or what?)
WA1QVM     599 599 Joel, MA
KC8JIE     559 569 Ed, MI (Congrats on first foxpelt from
me.)
KC8JNA     559 559 Tom, WV (comments below)
```

During the QSO between Ed and me, somebody came up right on top of us. We managed to finish the QSO and I QSYed down. I tried to announce it but I don't think it was heard. On my end the QRM was way over S9. I think I heard VE5RC at about S5 and tried to call him directly but I couldn't detect a response over the QRM.

KC8JNA - He got his license yesterday and bagged a fox that same evening. I must apologize to the hunters who didn't get a contact last night while I was working Tom. I'm sorry I took so much time with Tom but I couldn't bring myself to be rude and cut him off. I have a real hard time behaving rudely without being provoked and he was trying so hard. I give Tom a lot of credit for getting on the air the same day he got his license. It took me several days to work up the courage, and I had voice priveledges (ex DA1TT). When I send a QSL card I will enclose a letter welcoming him to ham radio and explaining all about the foxhunts and QRP in general. Perhaps as his first introduction to QRP and ham radio, he will be inspired to join the ranks.

Tom's code speed was very slow, I would guess on the order of 3 WPM. While my code speed isn't much faster, I can truly appreciate how difficult it is for some of you speed demons to slow down to my speed.

Look for me this weekend on the QRP-ARCI N/T+ sprint.

My next scheduled fox time is next Thursday 19 Mar 1900-2100 EST (20 Mar 0000-0200 UTC) so slide on up to the Novice band. It will be my last time as fox before my VE exam.

73

Preston, n0glm, Southern NY State (no e-mail til monday)

My words, not my employer's

-----  
Date: Fri, 13 Mar 1998 16:40:52 -0600 (CST)  
From: jdenison@morelr.com (JOEL DENISON)  
To: qrp-l@Lehigh.EDU  
Subject: [5977] antenna up, despite gereaux  
Message-ID: <199803132240.QAA06251@m20.morelr.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

High gang:

as u know I put the rg8u together to form twin-lead of sorts... boy



is it heavy, but works... I got an inverted vee up about fifty feet.,, and managed to stay upright on the ice out there...

bands seem kinda quiet, is it the antenna or conditions????

Anybody know the impedeance of coax used as twinlead...

Twenty degrees has no business out side of the refrigerator!!!!

Longfellow had no business wanting Evangeline to move to the northeast or did she want to stay up nor-east???? He should have kept his mind on haming!! qrp style...

bye now

joel, in maine, in sneaux

God Bless

Joel

WA5CVM

Joel Denison

PO BOX 542

Strong, Maine 04983

jdenison@morelr.com

Gentlemen don't Cry, They QSY :-)

Gentle Lady (RC Sail Plane)(049 engine - start)

40 mtr loop up 50ft

QRP ARCI 4066 NEW ENGLAND QRP 476 QRP-L 765

AK/QRP 109

-----  
Date: Fri, 13 Mar 1998 17:52:16 -0500

From: Bob <hb\_elec@ids.net>

To: qrp-l@Lehigh.EDU

Subject: [5978] Re: Newbie

Message-ID: <3.0.1.32.19980313175216.006c942c@mail.ids.net>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

At 02:02 PM 3/13/98 -0600, you wrote:

>Hi All.

>

>I am new to the list and new to QRP (in fact, so new that I don't have  
>rig) and am looking for ideas, suggestions, ect. in getting started.

>Any help will be appreciated.

Mike,

Welcome to the list. Thie is sure the place to be if your intrested in QRP.

Im sure you will find lots of great kits and there are more to come.

My advice, which is worth what you pay for it :-), is to find a rig with a good reciever. Transmitters tend to be transmitters, but a reciever in the

rig can make a world of difference in my opinion.

If you would like some specifics send me an E-Mail and I'll be happy to help as much as I can.

72's Bob N1PWU

-----  
Bob N1PWU - HB Electronics  
<[http://users.ids.net/~hb\\_elec](http://users.ids.net/~hb_elec)>

-----  
Date: Fri, 13 Mar 1998 18:16:39 -0500  
From: wd4nak@juno.com  
To: qrp-1@Lehigh.EDU  
Subject: [5979] TS 520S or TS120S power  
Message-ID: <19980313.181640.14494.0.wd4nak@juno.com>

Say guy's can you cut the power down to 5 watts on a TS520S and a TS120S  
I need to know some one set me straight.

Charles

WD4NAK

-----  
You don't need to buy Internet access to use free Internet e-mail.  
Get completely free e-mail from Juno at <http://www.juno.com>  
Or call Juno at (800) 654-JUNO [654-5866]

-----  
Date: Fri, 13 Mar 1998 16:40:17 -0700 (MST)  
From: Joe Gervais <[vole@primenet.com](mailto:vole@primenet.com)>  
To: qrp-1@Lehigh.EDU  
Subject: [5980] The Balanced Ham (Long)  
Message-ID: <199803132340.QAA10835@usr09.primenet.com>

Howdy Folks,

Not to get all mushy or anything, but just wanted to remind everyone about the "Balanced Ham". C'mon, admit it - Fox Hunting, DX, contests, 2xQRP WAS, getting a

new kit on the air, melting solder, it's all GREAT stuff. That's why we spend so much time doing it! Shoot, I could probably do QRP every waking hour, 7 days a week and not get tired of it!

But...

Are you spending enough time with family/friends? Until recently I \*thought\* I was, but after putting yet another relative in the ground last week, I sat back and took a hard look at my life. I'd missed quite a few bedtime stories for the kids while rabidly chasing Foxii. DX was keeping me up at very odd hours, and mornings that would've otherwise been spent playing with the family were spent checking every band for an opening.

Just when I had committed to pursuing some hardcore HB/RF design projects, the bad news hit. So I sat back. Spent time hiking with the kidlettes, teaching them all those nifty things my Dad had taught me. Lounged on the couch at night with my wife, working out our vacation/travel dreams for when the kids go off to college. Played hide-and-seek with our littlest rugrat around the couch. And found out just how much I'd really been missing without realizing it.

Not that I plan to go QRT or anything, but I decided I definitely needed to re-think my priorities. So I did. When it's bedtime, I'll take a break from the Fox pileup to read the kids' favorite book ("If You Give a Moose a Muffin"). If the band is open to Africa but my wife and I have plans to go to the movies, I'll shut the rig down. I'll still operate and build of course! Just at a slower, relaxed pace. There will always be another solar cycle, another kit, another contest after all. Other things in life are not so easily regained, and worth far more than some paper on the wall....

There is no one right answer for everyone, of course. But with Fox season/DX contests winding down, it might be a good time to step back for a bit and take a look at yourself. Odds are you won't find anything out of sorts, but you may realize you're missing out on something you won't be able to replace later in life.

As my Dad used to say, "Any day above ground is a

good one!" To that I'll add, "Use it or lose it."

Wishing you good times and spontaneous laughter with family and friends...

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"Every man dies. Not every man really lives" -- Braveheart

-----  
Date: Fri, 13 Mar 1998 15:58:33 -0700  
From: Kory Hamzeh <kory@avatar.com>  
To: vole@primenet.com, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [5981] Re: The Balanced Ham (Long)  
Message-ID: <3.0.5.32.19980313155833.00963250@ns1.avatar.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

At 04:40 PM 3/13/98 -0700, Joe Gervais wrote:

>  
> [snip]  
>  
>Are you spending enough time with family/friends?  
>Until recently I \*thought\* I was, but after putting  
>yet another relative in the ground last week, I sat  
>back and took a hard look at my life. I'd missed quite  
>a few bedtime stories for the kids while rabidly chasing  
>Foxii. DX was keeping me up at very odd hours, and  
>mornings that would've otherwise been spent playing  
>with the family were spent checking every band for  
>an opening.  
>  
> [snip]  
>

I came to this realization about 6 months ago and I've started spending more time with the kids and the wife. I have to girls, 5 & 7 years old, and I want to enjoy them now before they become teenagers! :-)

I still operate though whenever I have some free time.

73,  
Kory  
AC6RN

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End of QRP-L Digest 1028

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